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<u>Performance Analysis of Four SIMD Machines - Rod Fatoohi (1993)</u> <u>(Correct)</u> <u>(5 citations)</u>
machines are: a 32k processor CM2, a 16k processor **MPP**, a 16k processor MasPar MP-1, and a 4k processor
NN: Nearest Neighbor The CM2 at NAS has 32k **1-bit serial** processors and 1024 processing elements (PEs)
the programming language used. The performance of **Single** Instruction Multiple Data (SIMD) machines has
ftp.ai.mit.edu/pub/users/misha/backup/vision/RNR-92-034.ps.gz

**One or more of the query terms is very common - only partial results have been returned. Try <u>Google</u>
(RI).**

<u>Performance Instrumentation Techniques for Parallel Systems - Reed (1993)</u> <u>(Correct)</u> <u>(4 citations)</u>
Machines CM-5, Ncube/3, Cray T3D, and Convex **MPP**. System Software Hardware Run-time System
MIMD. Exemplars of these classes include the **bit-serial** SIMD Thinking Machines CM-2, the shared memory
the variance in performance is high, both in a **single** application and across a group of applications)
vibes.cs.uiuc.edu/Publications/Papers/Springer.ps.gz

<u>Processing Element and Custom Chip Architecture for the.. - Revision Donald (1987)</u> <u>(Correct)</u> <u>(1 citation)</u>
systems are the Massively Parallel Processor (**MPP**) built by Goodyear Aerospace Corporation (now
of an individual PE. They operate in **bit-serial** fashion. VLSI technology is essential to the
speedup is the use of many processors driven by a **single** control unit. This is the **single** instruction
www.cse.ucsc.edu/~rph/ce290ms96/blitz_tr.ps

<u>The Disputer : A Dual Paradigm Parallel Processor for Graphics.. - Ian Page</u> <u>(Correct)</u>
such as the DAP (Reddaway, 1973)CLIP (Duff, 1976)**MPP** (Batcher, 1980)and the Connection Machine
Vision. The seed that germinated into today's **bit-serial**, SIMD processor arrays was a paper by Shooman
of pixels. For this type of algorithm, the SIMD (**Single** Instruction Stream, Multiple Data Stream, or
ftp.comlab.ox.ac.uk/pub/Documents/techpapers/Ian.Page/disputer.ps.gz

<u>The Interlocking Bus Network For Fault-Tolerant Processor.. - Siegle, Reeves, Kozminski</u> <u>(Correct)</u>
are Illiac-IV[1]the Connection Machine[2]the **MPP**[3]and BLITZEN[4]The processors are connected
and has a word width of **1 bit**, i.e. it is **bit-serial**. In the full-scale version, 128 chips are
The processors normally operate in SIMD mode (**single** instruction stream, multiple data stream)in
faui79.informatik.uni-erlangen.de/pub/doc/interlock.ps.Z

<u>A data parallel implementation of the TRFD program from the.. - David Lilja (1994)</u> <u>(Correct)</u>
www.cs.umn.edu/Research/Agassiz/agassiz
used in these experiments consists of p=32768 **bit-serial** processors running at 10 MHz. **One** 32-**bit**
these types of machines to the massively parallel **single**-instruction stream, multiple-data stream (SIMD)
ftp-mount.ee.umn.edu/pub/faculty/lilja/papers/trfd.mpp.ps.Z

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1 GPFP: an array processing element for the next generation of   82%
massively parallel supercomputer architectures
Don Beal , Costas Lambrinoudakis
Proceedings of the 1991 conference on Supercomputing August 1991

2 A fault tolerant, bit-parallel, cellular array processor   80%
Steven G. Morton
Proceedings of 1986 fall joint computer conference on Fall joint
computer conference November 1999

3 Message-passing algorithms for a SIMD torus with coteries   77%
M. Herbordt , C. Weems , J. Corbett
Proceedings of the second annual ACM symposium on Parallel
algorithms and architectures May 1990

4 Programming environments for highly parallel multiprocessors   77%
A. P. Reeves
Proceedings of the third conference on Hypercube concurrent
computers and applications: Architecture, software, computer
systems, and general issues - Volume 1 January 1988
    Emerging highly parallel multiprocessors offer an exciting
    alternative to conventional pipelined supercomputers for a variety
    of computationally intensive scientific applications. A factor that

has impeded the introduction of these multiprocessor systems is
that conventional languages, such as Fortran, cannot be directly
used and new programming techniques must be mastered. A key
issue for highly parallel systems is the development of appropriate
programming environments. Program ...

5 Compiling Fortran 8x array features for the connection machine   77%
computer system
Eugene Albert , Kathleen Knobe , Joan D. Lukas , Guy L. Steele
ACM SIGPLAN Notices , Proceedings of the ACM/SIGPLAN conference
on Parallel programming: experience with applications, languages and
systems January 1988
Volume 23 Issue 9
> The Connection Machine® computer system supports a data
> parallel programming style, making it a natural target architecture
> for Fortran 8x array constructs. The Connection Machine Fortran
> compiler generates VAX code that performs scalar operations and
> directs the Connection Machine to perform array operations. The
> Connection Machine virtual processor mechanism supports
> elemental operations on very large arrays. Most array operators
> and intrinsic functions map into single instructions or ...

6 A bit-plane architecture for optical computing with   77%
two-dimensional symbolic substitution
A. Louri , K. Hwang
The 15th Annual International Symposium on Computer architecture
June 1988
> A novel architecture based on optical technology is presented for
> constructing parallel computers. The architecture exploits optics
> for its ultra-high speed, massive parallelism, and dense
> connectivity. The processing is based on a new technique called
> 2-D symbolic substitution which can be implemented with very
> fast optical components. Two-dimensional symbolic substitution
> algorithms are developed for arithmetic/logic operations as well
> as for complex scientific computatio ...

7 Concurrency and parallelism—future of computing   77%
M. Andrews , J. S. Walicki
Proceedings of the 1985 ACM annual conference on The range of
computing : mid-80's perspective: mid-80's perspective October 1985

8 Architecture of a massively parallel processor   77%
Kenneth E. Batcher
25 years of the international symposia on Computer architecture

(selected papers) August 1998

9 On the benefit of supporting virtual channels in wormhole   77%
routers
Richard J. Cole , Bruce M. Maggs , Ramesh K. Sitaraman
Proceedings of the eighth annual ACM symposium on Parallel
algorithms and architectures June 1996

10 S-connect   77%
Andreas G. Nowatzyk , Michael C. Browne , Edmund J. Kelly , Michael
Parkin
ACM SIGARCH Computer Architecture News , Proceedings of the 22nd
annual international symposium on Computer architecture May 1995
Volume 23 Issue 2

11 Pseudo MIMD array processor—AAP2   77%
T. Kondo , T. Tsuchiya , T. Kitamura , Y. Sugiyama , T. Kimura
ACM SIGARCH Computer Architecture News , Proceedings of the 13th
annual international symposium on Computer architecture June 1986
Volume 14 Issue 2
> A highly integrated array processor (AAP2)-LSI has been
> developed. After the past 3 years study on the adaptive array
> processor 1 (AAP1), a challenging improvements on the SIMD's
> restraints are achieved by using the AAP2-LSI. The AAP2 array
> system makes it possible to carry out wideband modifiable
> operation (pseudo MIMD). Furthermore, each PE is capable of
> supporting a large amount of memory. The AAP2 potential for
> massively, parallel and pipelined processing is discussed in the
> field of im ...

12 Performance analysis of four SIMD machines   77%
Rod Fatoohi
Proceedings of the 7th international conference on Supercomputing
August 1993
> This paper presents the results of an experiment to study the
> performance of four SIMD machines. The objectives of this study
> are to analyze the cost of regular communication on several SIMD
> machines and study its impact on the performance of two kernels.
> The machines are: a 32k processor CM2, a 16k processor MPP, a
> 16k processor MasPar MP-1, and a 4k processor DAP 610C.
> Regular communication is exemplified, in this study, by the shift
> operation where all elements of an array are shifted so ...

13 IXM2   77%

Tetsuya Higuchi , Tatsumi Furuya , Kenichi Handa , Naoto Takahashi ,
Hiroyasu Nishiyama , Akio Kokubu
ACM SIGARCH Computer Architecture News , Proceedings of the 18th
annual international symposium on Computer architecture April 1991
Volume 19 Issue 3

14 A symbolic substitution based parallel architecture and   77%
algorithms for high-speed parallel processing
Ahmed Louri
Proceedings of the 1990 ACM annual conference on Cooperation
January 1990

> A new parallel architecture that is amenable to optical
> implementation is presented for massively data-parallel
> computing. The architecture is an SIMD model that exploits
> spatial parallelism and processes 2-D binary images as
> fundamental computational entities. Processing is based on a new
> technique called symbolic substitution logic. A hierarchical
> mapping technique is presented for designing data-parallel
> algorithms and mapping them onto the optical architecture. The
> mapp ...

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(mpp or array processor) and bit serial

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Journal or Magazine = **JNL**   Conference = **CNF**   Standard = **STD**

1 **Massively parallel inner-product array processor**
Genov, R.; Cauwenberghs, G.
Neural Networks, 2001. Proceedings. IJCNN '01. International Joint Conferer
Volume: 1 , 2001
Page(s): 183 -188 vol.1

[Abstract]   [PDF Full-Text (504 KB)] **CNF**

2 **Charge-mode parallel architecture for vector-matrix multiplication**
Genov, R.; Cauwenberghs, G.
Circuits and Systems II: Analog and Digital Signal Processing, IEEE Transact
Volume: 48 Issue: 10 , Oct. 2001
Page(s): 930 -936

[Abstract]   [PDF Full-Text (205 KB)] **JNL**

3 **Non-synchronous control of bit-serial video signal processor array
architectures**
Riocreux, P.A.; Yates, R.B.
Image Processing, 1996. Proceedings., International Conference on , Volume
Page(s): 165 -168 vol.2

[Abstract]   [PDF Full-Text (376 KB)] **CNF**

4 **Fast linear Hough transform**
Vuillemin, J.E.
Application Specific Array Processors, 1994. Proceedings. International Confi

1994
Page(s): 1 -9

[Abstract] [PDF Full-Text (352 KB)] **CNF**

5 **A compact array processor based on self-timed simultaneous bidir**
signalling
Yacoub, G.Y.; Soni, T.; Ku, W.H.
Circuits and Systems, 1993., ISCAS '93, 1993 IEEE International Symposiun
1993
Page(s): 1893 -1896 vol.3

[Abstract] [PDF Full-Text (336 KB)] **CNF**

6 **Digit systolic algorithms for fine-grain architectures**
Nagendra, C.; Owens, R.M.; Irwin, M.J.
Application-Specific Array Processors, 1993. Proceedings., International Con
, 1993
Page(s): 466 -477

[Abstract] [PDF Full-Text (548 KB)] **CNF**

7 **GENES IV: A bit-serial processing element for a built-model neural-**
accelerator
Ienne, P.; Viredaz, M.A.
Application-Specific Array Processors, 1993. Proceedings., International Con
, 1993
Page(s): 345 -356

[Abstract] [PDF Full-Text (540 KB)] **CNF**

8 **2-D discrete cosine transform array processor using non-planar co**

Ko, C.; Chung, W.
Data Compression Conference, 1991. DCC '91. , 1991
Page(s): 456

[Abstract] [PDF Full-Text (48 KB)] **CNF**

9 **A sliding memory array processor for low level vision**
Sunwoo, M.H.; Aggarwal, J.K.
Pattern Recognition, 1990. Proceedings., 10th International Conference on ,
, 1990
Page(s): 312 -317 vol.2

[Abstract]   [PDF Full-Text (504 KB)] **CNF**

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10 **PASIC. A sensor/processor array for computer vision**
Chen, K.; Danielsson, P.E.; Astrom, A.
Application Specific Array Processors, 1990. Proceedings of the International
Conference on , 1990
Page(s): 352 -366

[Abstract]   [PDF Full-Text (472 KB)] **CNF**

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11 **Byte-serial convolvers**
Dadda, L.
Application Specific Array Processors, 1990. Proceedings of the International
Conference on , 1990
Page(s): 530 -541

[Abstract]   [PDF Full-Text (476 KB)] **CNF**

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12 **The bit-serial systolic back-projection engine (BSSBPE)**
Bayford, R.
Application Specific Array Processors, 1990. Proceedings of the International
Conference on , 1990
Page(s): 43 -54

[Abstract]   [PDF Full-Text (344 KB)] **CNF**

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13 **Digit-serial DSP architectures**
Parhi, K.K.; Wang, C.Y.
Application Specific Array Processors, 1990. Proceedings of the International
Conference on , 1990
Page(s): 341 -351

[Abstract]   [PDF Full-Text (412 KB)] **CNF**

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14 **A multiple-level heterogeneous architecture for image understand**
Shu, D.B.; Nash, J.G.; Weems, C.C.
Application Specific Array Processors, 1990. Proceedings of the International
Conference on , 1990
Page(s): 615 -627

[Abstract]   [PDF Full-Text (608 KB)] **CNF**

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15 Use of A*N+B codes for fault-tolerant bit-serial array processors
Piuri, V.
Computers and Communications, 1989. Conference Proceedings., Eighth Ani
International Phoenix Conference on , 1989
Page(s): 9 -13

[Abstract]   [PDF Full-Text (504 KB)] **CNF**

16 Applications Of The Martin Marietta Single Module Advanced Syst<
Processor
Haug, A.; Graybill, R.
Signals, Systems and Computers, 1988. Twenty-Second Asilomar Conferenc
Volume: 1 , 1988
Page(s): 189 -193

[Abstract]   [PDF Full-Text (348 KB)] **CNF**

17 CESAR-A programmable high performance systolic array processo
Toverud, M.; Anderson, V.
Computer Design: VLSI in Computers and Processors, 1988. ICCD '88., Proc
the 1988 IEEE International Conference on , 1988
Page(s): 414 -417

[Abstract]   [PDF Full-Text (284 KB)] **CNF**

18 A massively parallel systolic array processor system
Morley, R.E., Jr.; Sullivan, T.J.
Systolic Arrays, 1988., Proceedings of the International Conference on , 198
Page(s): 217 -225

[Abstract]   [PDF Full-Text (436 KB)] **CNF**

19 The design of a bit-serial coprocessor to perform multiplication an
division on a massively parallel architecture
Morley, R.E., Jr.; Christensen, G.E.; Sullivan, T.J.; Kamin, O.
Frontiers of Massively Parallel Computation, 1988. Proceedings., 2nd Sympo
the Frontiers of , 1989
Page(s): 419 -422

[Abstract]   [PDF Full-Text (236 KB)] **CNF**

20 BLITZEN: a highly integrated massively parallel machine
Blevins, D.W.; Davis, E.W.; Heaton, R.A.; Reif, J.H.
Frontiers of Massively Parallel Computation, 1988. Proceedings., 2nd Sympo

the Frontiers of , 1989
Page(s): 399 -406

[Abstract]   [PDF Full-Text (532 KB)] **CNF**

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21 **The Martin Marietta advanced systolic array processor**
Haug, A.; Graybill, R.
Frontiers of Massively Parallel Computation, 1988. Proceedings., 2nd Sympo
the Frontiers of , 1989
Page(s): 367 -372

[Abstract]   [PDF Full-Text (296 KB)] **CNF**

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22 **New data movement algorithms for processor arrays**
Soraghan, J.J.
Acoustics, Speech, and Signal Processing, 1988. ICASSP-88., 1988 Internati
Conference on , 1988
Page(s): 1930 -1933 vol.3

[Abstract]   [PDF Full-Text (268 KB)] **CNF**

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014519001   **Image available**
WPI Acc No: 2002-339704/200237
XRPX Acc No: N02-267131
  **Active memory device for computer memory devices has connection circuit
  in which multiple PEs share their connection to multiple data bits in the
  memory array**
Patent Assignee: MICRON TECHNOLOGY INC (MICR-N)
Inventor: **KIRSCH G**
Number of Countries: 096 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
WO 200219129 A2 20020307 WO 2001US27047 A   20010831   200237 B

Priority Applications (No Type Date): US 2000652003 A 20000831
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
WO 200219129 A2 E 51 G06F-015/16
    Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
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    PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

Abstract (Basic): WO 200219129 A2
      NOVELTY - The memory includes a main memory and several processing
    elements. Each of the processing elements is coupled to a respective
    portion of the main memory by a single bit connection. A circuit is
    coupled between the main memory and the processing elements.
      The circuit writes data from the processing elements to the memory
    in a horizontal mode and reads data stored in the main memory in a
    horizontal mode from the main memory to the processing elements.
      DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a memory
    device, for a circuit for connecting a memory device and a processing
    element of an active memory, for a processing system and for a method
    for writing data from a processing element to a memory device.
      USE - For computer memory devices.
      ADVANTAGE - Provides connection between a PE array and main memory
    in an MPP such that software data conversion is not required and data
    can be stored in a normal mode or vertical mode in the memory.
      DESCRIPTION OF DRAWING(S) - The figure shows a connection between a
    PE array and a memory.
      pp; 51 DwgNo 5/7
Title Terms: ACTIVE; MEMORY; DEVICE; COMPUTER; MEMORY; DEVICE; CONNECT;
  CIRCUIT; MULTIPLE; PES; SHARE; CONNECT; MULTIPLE; DATA; BIT; MEMORY;
  ARRAY
Derwent Class: T01
International Patent Class (Main): **G06F-015/16**
File Segment: EPI

4/5/2   (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012841041   **Image available**
WPI Acc No: 2000-012873/200001

XRPX Acc No: N00-009985
  Control logic designing system for complex digital system
Patent Assignee: LSI LOGIC CORP (LSIL-N)
Inventor: **KIRSCH G**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5987239	A	19991116	US 96766650	A	19961213	200001	B

Priority Applications (No Type Date): US 96766650 A 19961213
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5987239	A		13	G06F-017/50	

Abstract (Basic): US 5987239 A
     NOVELTY – A preprocessor combines skeleton file with one or more
  macrofiles to form output file. The preprocessor (32) processes or
  conditions the source code before it is passed onto compiler. The
  skeleton file, macrofiles and output file are stored in memory of
  computer system.
     DETAILED DESCRIPTION – An INDEPENDENT CLAIM is also included for
  control logic designing method for building a hardware description
  language.
     USE – For complex digital system represented in hardware
  description language.
     ADVANTAGE – The creation of single monolithic hardware description
  language source code file containing repetitions segments of microcode,
  is avoided by facilitating control logic design for a complex digital
  system.
     DESCRIPTION OF DRAWING(S) – The figure shows a flow diagram
  describing the operation of preprocessor.
     Preprocessor (32)
     pp; 13 DwgNo 3/5
Title Terms: CONTROL; LOGIC; DESIGN; SYSTEM; COMPLEX; DIGITAL; SYSTEM
Derwent Class: T01
International Patent Class (Main): **G06F-017/50**
File Segment: EPI

 4/5/3   (Item 3 from file: 350)
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012829977   **Image available**
WPI Acc No: 2000-001809/200001
Related WPI Acc No: 1999-622401
XRPX Acc No: N00-001565
  Processor with in-circuit emulation e.g. for system development
Patent Assignee: LSI LOGIC CORP (LSIL-N)
Inventor: KERSHAW S; **KIRSCH G** ; KERSHAW S M
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2338320	A	19991215	GB 9812512	A	19980610	200001	B
US 6385742	B1	20020507	US 99262816	A	19990305	200235	

Priority Applications (No Type Date): GB 984910 A 19980306
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2338320	A		14	G06F-011/00	
US 6385742	B1			G06F-011/28	

Abstract (Basic): GB 2338320 A
        NOVELTY - The processor uses a series of scan-chains serially
    connected registers coupled to a serial scanning unit to execute the
    emulation. The first scan-chain includes an address register (16) for
    providing an address on an address bus to memory (14). The address
    register value is incremented by the processor. The scan-chains are
    arranged to control the processor incrementation, whilst a second
    scan-chain includes a data register coupled to the data bus (91) of the
    memory to read/write data.
        DETAILED DESCRIPTION - The output of the data register is coupled
    to an incrementor via an address multiplexer (102), which in turn is
    controlled by the microcode register. Memory access for debugging is
    made practicable by limiting the number of operations needed for each
    access.
        An INDEPENDENT CLAIM is include for a method of in-circuit
    emulation for a processor.
        USE - Processor with in-circuit emulation, for carrying out
    debugging operations during development.
        ADVANTAGE - The processor development system can access memory for
    debugging without creating undue demands on the memory for this
    operation, thus preventing undue delays.
        DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of the
    processor.
        Synchronous memory (14)
        Address register (16)
        Data bus (91)
        Address multiplexer (102)
        pp; 14 DwgNo 1/2
Title Terms: PROCESSOR; CIRCUIT; EMULATION; SYSTEM; DEVELOP
Derwent Class: T01
International Patent Class (Main): **G06F-011/00 ; G06F-011/28**
International Patent Class (Additional): **G06F-009/455**
File Segment: EPI

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012816170   **Image available**
WPI Acc No: 1999-622401/199954
Related WPI Acc No: 2000-001809
XRPX Acc No: N99-459290
   Software debugging in circuit emulation with scan chains for use in
   pipeline microprocessors
Patent Assignee: LSI LOGIC CORP (LSIL-N)
Inventor: KERSHAW S; **KIRSCH G**
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
GB 2337834   A   19991201 GB 984910   A   19980306 199954 B

Priority Applications (No Type Date): GB 984910 A 19980306
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
GB 2337834   A   17 G06F-011/00

Abstract (Basic): GB 2337834 A
        NOVELTY - The processor (40) to be debugged is provided with a
    chain of scan registers (16) and a breakpoint interrupt is either

detected or created (52). The processor completes it current
instruction and sends a signal to the scan interface logic which
asserts the start scan signal (48) on the clock control unit (46). The
clock controller stops the processor clock and the external scan unit
is alerted to start the scan sequence.
    DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the
method of carrying out debugging procedures on a processor with scan
registers.
    USE - For carrying out debugging procedures on a processor,
especially suited to pipeline processors.
    ADVANTAGE - A software debugging in circuit emulation session can
be entered without the need to stop the processor clock during current
actions. The pipeline is filled with no operation instructions (NOP) so
that information in the pipeline is not lost.
    DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of
the processor debugging apparatus.
    Scan registers (16)
    Processor (40)
    Clock control unit (46)
    Start scan signal (48)
    Breakpoint interrupt (52)
    pp; 17 DwgNo 4/7
Title Terms: SOFTWARE; DEBUG; CIRCUIT; EMULATION; SCAN; CHAIN; PIPE;
  MICROPROCESSOR
Derwent Class: T01
International Patent Class (Main): **G06F-011/00**
International Patent Class (Additional): **G06F-011/34**
File Segment: EPI

  4/5/5   (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012804397   **Image available**
WPI Acc No: 1999-610627/199952
XRPX Acc No: N99-449928
  Debugging method for use in microprocessor development system
Patent Assignee: LSI LOGIC CORP (LSIL-N)
Inventor: KERSHAW S; **KIRSCH G** ; SLADE B
Number of Countries: 084 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9948001	A1	19990923	WO 99GB840	A	19990318	199952	B
AU 9929464	A	19991011	AU 9929464	A	19990318	200008	

Priority Applications (No Type Date): GB 9810774 A 19980519; GB 985832 A
  19980318
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9948001	A1	E	21	G06F-011/00	

    Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU
    CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
    LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL
    TJ TM TR TT UA UG US UZ VN YU ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

AU 9929464	A			G06F-011/00	Based on patent WO 9948001

Abstract (Basic): WO 9948001 A1
        NOVELTY - A host computer system writes a program for reading

and/or writing data at a specified memory location corresponding to the memory mapped area of peripheral devices, into the memory (4) of a processor (2). The system enables the processor to run the stored program and then return to the debug process in which the data at specified location is written to host computer system.

DETAILED DESCRIPTION - The processor (2) includes in- circuit emulation unit with one or more scan chains (6) of serially connected registers (8) that are accessed by the external host computer system. The host computer system carries out debugging via scan chains and selectively interrupts debugging for accessing peripheral memory mapped device. The scan chains are connected to an interface (10) which is coupled to the host computer (12), and permits transfer of data and instructions during debugging or scanning. The host computer (12) includes a file (16) containing configuration information of selected registers of the target processor, based on which the host computer selectively configures predetermined registers of the processor for the program to be run by the processor.

USE - For debugging host computer in microprocessor development system.

ADVANTAGE - Reduces cost since memory space required for storing monitor program, is reduced. Permits complete observation of working of microprocessor since the microprocessor's registers are coupled together in series to form one or more test chains which can be accessed by external host to load test data and to read out the results in a serial manner. Once the data transfer is complete, the back-up data and program RAM contents are loaded back into the quantity of RAM and execution can be continued normally, hence the need for complex logic is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows schematic block diagram of debug system and target processor.

Processor (2)
Memory (4)
Scan chains (6)
Register (8)
Interface (10)
Host computer (12)
File (16)
pp; 21 DwgNo 1/6

Title Terms: DEBUG; METHOD; MICROPROCESSOR; DEVELOP; SYSTEM
Derwent Class: T01
International Patent Class (Main): **G06F-011/00**
File Segment: EPI

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Set      Items    Description
S1       19546    MASSIVELY()PARALLEL()PROCESSOR? OR MPP OR PLURALITY()PROCE-
                  SSING()ELEMENT? OR PPE OR PE OR PROCESSOR()(ARRAY? OR ARRANGE-
                  MENT? OR ORDER OR FORMATION)
S2       28168    (SERIAL? OR CONSECUTIVE? OR SUCCESSIVE? OR SEQUENTIAL?)(2N-
                  )(CONNECT? OR LINK?) OR SINGLE()BIT
S3        2191    MODE? (3N) (VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUM-
                  N?)
S4       12790    MODE? (3N) (HORIZONTAL? OR ROW OR NORMAL?)
S5         608    MODE? (3N) (BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DI-
                  RECTION? OR PERPENDICULAR? OR STRAIGHT()LINE)
S6         734    VERTICAL()(MEMORY OR STORE? OR STORAGE OR ROM)
S7     1075026    VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUMN?
S8     1094350    HORIZONTAL? OR ROW OR NORMAL?
S9      359717    BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DIRECTION? OR -
                  PERPENDICULAR? OR STRAIGHT()LINE
S10          0    S1 AND S2 AND S3 AND S4 AND S5 AND S6
S11         32    S1 AND S2
S12          0    S3 AND S4 AND S5 AND S6
S13          2    S3 AND S4 AND S5
S14          0    S1 AND S6
S15          2    S2 AND S6
S16          1    S11 AND S3
S17          2    S11 AND S4
S18          0    S11 AND S5
S19          0    S11 AND S6
S20      47682    S1 OR S2
S21         11    S20 AND S3
S22         72    S20 AND S4
S23          1    S20 AND S5
S24          2    S20 AND S6
S25         81    S21 OR S22 OR S33 OR S24
S26         31    S25 AND IC=G06F?
S27         59    S20 AND S7 AND S8 AND S9
S28         10    S27 AND IC=G06F?
S29         10    S28 NOT S26
S30         41    S26 OR S28
S31         41    IDPAT (sorted in duplicate/non-duplicate order)
S32         41    IDPAT (primary/non-duplicate records only)
File 347:JAPIO Oct 1976-2002/Mar(Updated 020702)
         (c) 2002 JPO & JAPIO
File 350:Derwent WPIX 1963-2002/UD,UM &UP=200247
         (c) 2002  Thomson Derwent
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32/5/1   (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014622819   **Image available**
WPI Acc No: 2002-443523/200247
XRPX Acc No: N02-349456
  **Interface device has physical layer which outputs standby signal in
  active state to optical transceiver to change transceiver from** normal
  operation mode **to low power consumption mode**
Patent Assignee: NEC CORP (NIDE)
Inventor: TAKEUCHI J
Number of Countries: 002 Number of Patents: 002
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
US 20020046355 A1   20020418 US 2001970529   A   20011004 200247 B
JP 2002118563 A   20020419 JP 2000306704   A   20001005 200247

Priority Applications (No Type Date): JP 2000306704 A 20001005
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
US 20020046355 A1   26 G06F-001/26
JP 2002118563 A   16 H04L-012/28   .

Abstract (Basic): US 20020046355 A1
      NOVELTY - A physical layer (10) outputs a standby signal in an
  active state to an optical transceiver (30) to change the transceiver
  from **normal** operation **mode** to low power consumption mode, when the
  physical layer is in low power consumption mode.
      DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for
  interface device power control method.
      USE - Interface device.
      ADVANTAGE - The transition of optical transceiver to low power
  consumption mode, when the physical layer is in low power consumption
  mode, enables reduction in the power consumption of the device.
      DESCRIPTION OF DRAWING(S) - The figure shows the configuration of
  the interface device.
      Physical layer (10)
      Optical transceiver (30)
      pp; 26 DwgNo 1/14
Title Terms: INTERFACE; DEVICE; PHYSICAL; LAYER; OUTPUT; STANDBY; SIGNAL;
  ACTIVE; STATE; OPTICAL; TRANSCEIVER; CHANGE; TRANSCEIVER; NORMAL; OPERATE
  ; MODE; LOW; POWER; CONSUME; MODE
Derwent Class: T01; U12; W01; W02
International Patent Class (Main): **G06F-001/26** ; H04L-012/28
International Patent Class (Additional): **G06F-001/32** ; H04B-001/40;
  H04B-007/26; H04B-010/20; H04L-029/00
File Segment: EPI

32/5/2   (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

014519001   **Image available**
WPI Acc No: 2002-339704/200237
XRPX Acc No: N02-267131
  **Active memory device for computer memory devices has connection circuit
  in which multiple PEs share their connection to multiple data bits in the
  memory array**
Patent Assignee: MICRON TECHNOLOGY INC (MICR-N)

Inventor: KIRSCH G
Number of Countries: 096   Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
WO 200219129   A2   20020307   WO 2001US27047   A   20010831   200237   B

Priority Applications (No Type Date): US 2000652003 A 20000831
Patent Details:
Patent No   Kind Lan Pg   Main IPC   Filing Notes
WO 200219129 A2 E   51 G06F-015/16
    Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
    CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
    IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
    PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

Abstract (Basic): WO 200219129 A2
        NOVELTY - The memory includes a main memory and several processing
    elements. Each of the processing elements is coupled to a respective
    portion of the main memory by a **single bit** connection. A circuit is
    coupled between the main memory and the processing elements.
        The circuit writes data from the processing elements to the memory
    in a **horizontal   mode** and reads data stored in the main memory in a
    horizontal mode from the main memory to the processing elements.
        DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a memory
    device, for a circuit for connecting a memory device and a processing
    element of an active memory, for a processing system and for a method
    for writing data from a processing element to a memory device.
        USE - For computer memory devices.
        ADVANTAGE - Provides connection between a **PE** array and main
    memory in an **MPP** such that software data conversion is not required
    and data can be stored in a **normal   mode** or **vertical   mode** in the
    memory.
        DESCRIPTION OF DRAWING(S) - The figure shows a connection between a
    PE array and a memory.
        pp; 51 DwgNo 5/7
Title Terms: ACTIVE; MEMORY; DEVICE; COMPUTER; MEMORY; DEVICE; CONNECT;
   CIRCUIT; MULTIPLE; PES; SHARE; CONNECT; MULTIPLE; DATA; BIT; MEMORY;
   ARRAY
Derwent Class: T01
International Patent Class (Main): **G06F-015/16**
File Segment: EPI

   32/5/3   (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014375290   **Image available**
WPI Acc No: 2002-195993/200225
XRPX Acc No: N02-148848
   **Microcode multi-way branching system e.g. for microprocessors, utilizes a
   technique of microprocessed control which divides all instructions into
   normal '' and xway modes**
Patent Assignee: UNISYS CORP (BURS)
Inventor: CRISWELL P B; PETERSON E R
Number of Countries: 020   Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
WO 200210913   A1   20020207   WO 2001US21642   A   20010709   200225   B

Priority Applications (No Type Date): US 2000626030 A 20000727
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
WO 200210913 A1 E   22 G06F-009/28
    Designated States (National): JP
    Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU
    MC NL PT SE TR
Abstract (Basic): WO 200210913 A1
        NOVELTY - Data processing system has an instruction processor which
    is implemented using a microprogrammed and pipelined architecture
    comprises: a **normal   modes** ; an xway **mode** ; and a microprogramming
    bit which defines between the **normal   mode** and the xway mode.
        DETAILED DESCRIPTION - INDEPENDENT CLAIM is also included for the
    following:apparatus; method of processing a branch instruction
        USE - For microprocessors.
        ADVANTAGE - Provides branch control information one cycle earlier
    than found in conventional systems. This overcomes the latency involved
    in reading the control information from the microcode RAM. Thus, the
    system can branch on every machine cycle rather than on every other
    machine cycle. The number of bits required of the microcode is limited
    through the use of a Look Up Table (LUT).
        DESCRIPTION OF DRAWING(S) - The diagram shows the system with
    microcode multi-way branching capability
        single   bit position (112)
        look up table (102)
        pp; 22 DwgNo 2/4
Title Terms: MULTI; WAY; BRANCH; SYSTEM; MICROPROCESSOR; TECHNIQUE; CONTROL
    ; DIVIDE; INSTRUCTION; NORMAL; MODE
Derwent Class: T01
International Patent Class (Main): **G06F-009/28**
International Patent Class (Additional): **G06F-009/26**
File Segment: EPI

  32/5/4   (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013990110   **Image available**
WPI Acc No: 2001-474324/200151
  Palm sized portable computer for operating poniter of computer system
Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU)
Inventor: KIM J S
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
KR 2001011369 A   20010215 KR 9930689   A   19990727 200151 B

Priority Applications (No Type Date): KR 9930689 A 19990727
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
KR 2001011369 A   1 G06F-003/033

Abstract (Basic): KR 2001011369 A
        NOVELTY - A palm sized portable computer is provided to elaborately
    move a pointer on a screen of a computer system, for example in a
    graphic application program.
        DETAILED DESCRIPTION - A palm sized portable computer(200)
    comprises a stylus pen(210), a TSP(Touch Sensitive Panel, 220), a TSP
    interface(230), a memory(240), a CPU(250), an I/O controller(260) and a

serial port(270). The palm sized portable computer has a **normal mode** for performing a general computer function, and a pointing mode for moving a pointer on a display unit of a computer system(100). The normal node or the pointing mode can be selected by a user pushing a button displayed on the TSP(220) with the stylus pen(210). The serial port(270) is **connected** to a **serial** port of the computer system(100) for a data transmission. In the case that the palm sized portable computer is in the pointing mode, the data transmitted via the serial port(270) is a pointing data. The computer system displays the pointer on the display unit of the computer system according to the pointing data transmitted from the palm sized portable computer(200).

    pp; 1 DwgNo 1/10

Title Terms: PALM; SIZE; PORTABLE; COMPUTER; OPERATE; COMPUTER; SYSTEM
Derwent Class: T01
International Patent Class (Main): **G06F-003/033**
File Segment: EPI

32/5/5   **(Item 5 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
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013835374   **Image available**
WPI Acc No: 2001-319586/200134
Related WPI Acc No: 1998-243559; 2001-319585
XRPX Acc No: N01-229769
   Reprogramming a microprocessor through a serial port, where control of a microprocessor is achieved by a sequence of signals transmitted from an administrative computer through a serial port
Patent Assignee: EASTMAN KODAK CO (EAST)
Inventor: OLIVER J A
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2355326	A	20010418	GB 9719882	A	19970919	200134	B
			GB 2001718	A	20010111		
GB 2355326	B	20010711	GB 9719882	A	19970919	200140	
			GB 2001718	A	20010111		

Priority Applications (No Type Date): US 96719936 A 19960925
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2355326	A		20	G06F-009/445	Derived from application GB 9719882
GB 2355326	B			G06F-009/445	Derived from application GB 9719882

Abstract (Basic): GB 2355326 A
   NOVELTY - Administrative computer is **connected** to a **serial** port (18) on a machine (12) containing a microprocessor (30) or some other memory device to be reprogrammed. A sequence of signals is sent from the administrative computer to the microprocessor, via control grabber hardware circuit (28), to change the microprocessor from a **normal mode** to a bootstrap mode. A new program is then loaded from the administrative computer, and a second signal sequence is sent to reset the microprocessor. Both digital and analogue implementations of the control grabber circuit (28), which constantly monitors the state of handshake and receive data lines and identifies the proper sequence of signals, are described
   DETAILED DESCRIPTION - INDEPENDENT CLAIM is also included for the following:
   (a) apparatus containing microprocessor

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USE - For microprocessors.
ADVANTAGE - Reconfigures a programmable microprocessor using an existing interface without disassembly of the equipment containing the microprocessor.
DESCRIPTION OF DRAWING(S) - The diagram shows the system for reprogramming a microprocessor
microprocessor (30)
serial port (18)
control grabber hardware (28)
pp; 20 DwgNo 2/10
Title Terms: REPROGRAMMABLE; MICROPROCESSOR; THROUGH; SERIAL; PORT; CONTROL
; MICROPROCESSOR; ACHIEVE; SEQUENCE; SIGNAL; TRANSMIT; ADMINISTER;
COMPUTER; THROUGH; SERIAL; PORT
Derwent Class: T01; U21
International Patent Class (Main): **G06F-009/445**
File Segment: EPI

32/5/6   (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

013835373   **Image available**
WPI Acc No: 2001-319585/200134
Related WPI Acc No: 1998-243559; 2001-319586
XRPX Acc No: N01-229768
   **Reprogramming a microprocessor through a serial port, where
   administrative computer sends a sequence of signals to the microprocessor
   to activate a preinstalled program on the microprocessor**
Patent Assignee: EASTMAN KODAK CO (EAST)
Inventor: OLIVER J A
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2355325	A	20010418	GB 9719882	A	19970919	200134	B
			GB 2001707	A	20010111		
GB 2355325	B	20010711	GB 9719882	A	19970919	200140	
			GB 2001707	A	20010111		

Priority Applications (No Type Date): US 96719936 A 19960925
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2355325	A		19	G06F-009/445	Derived from application GB 9719882
GB 2355325	B			G06F-009/445	Derived from application GB 9719882

Abstract (Basic): GB 2355325 A
   NOVELTY - Administrative computer (14) is **connected** to a **serial**
port (18) on a machine (12) containing a microprocessor (30) or some
other memory device to be reprogrammed. A sequence of signals is sent
from the administrative computer to the microprocessor, via control
grabber hardware circuit (28), to change the microprocessor from a
normal   mode to a bootstrap mode. A new program is then loaded from
the administrative computer, and a second signal sequence is sent to
reset the microprocessor. Both digital and analogue implementations of
the control grabber circuit (28), which constantly monitors the state
of handshake and receive data lines and identifies the proper sequence
of signals, are described.
   USE - For microprocessors.
   ADVANTAGE - Reconfigures a programmable microprocessor using an
existing interface without disassembly of the equipment containing the

microprocessor.
      DESCRIPTION OF DRAWING(S) - The diagram shows the system for
reprogramming a microprocessor
      microprocessor (30)
      serial port (18)
      control grabber hardware (28)
      pp; 19 DwgNo 2/10
Title Terms: REPROGRAMMABLE; MICROPROCESSOR; THROUGH; SERIAL; PORT;
  ADMINISTER; COMPUTER; SEND; SEQUENCE; SIGNAL; MICROPROCESSOR; ACTIVATE;
  PROGRAM; MICROPROCESSOR
Derwent Class: T01; U21
International Patent Class (Main): **G06F-009/445**
File Segment: EPI

  32/5/7   (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012298323   **Image available**
WPI Acc No: 1999-104429/199909
XRPX Acc No: N99-075367
  **Diagnostic RAM mode for RAM limited microcontroller based applications -
  uses re-definition of RAM for special mode with data produce read via a
  serial link , the normal operation being curtailed during the procedure**
Patent Assignee: ANONYMOUS (ANON)
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind Date   Applicat No   Kind Date   Week
RD 417011   A   19990110 RD 98417011   A   19981220 199909 B

Priority Applications (No Type Date): RD 98417011 A 19981220
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
RD 417011   A   1 G06F-000/00

Abstract (Basic): RD 417011 A
      The special diagnostics RAM mode is redefined from the RAM
  definition constructed during **normal** operation. The **mode** allows for
  mirroring of EEPROM data in to RAM in pages of blocks of 64 or 128
  bytes depending on available RAM. The data is read then available to
  read via a **serial link** . Normal operation is curtailed during this
  mode and a part reset is executed upon completion.
      ADVANTAGE - Allows user access to data stored in external EEPROM in
  RAM limited microcontroller based applications.
      Dwg.1/1
Title Terms: DIAGNOSE; RAM; MODE; RAM; LIMIT; BASED; APPLY; DEFINE; RAM;
  SPECIAL; MODE; DATA; PRODUCE; READ; SERIAL; LINK; NORMAL; OPERATE;
  PROCEDURE
Derwent Class: T01
International Patent Class (Main): **G06F-000/00**
File Segment: EPI

  32/5/8   (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011826649   **Image available**
WPI Acc No: 1998-243559/199822
Related WPI Acc No: 2001-319585; 2001-319586

XRPX Acc No: N98-192802
Remote microprocessor reprogramming via serial port - involves sending signal sequence from administrative computer to microprocessor followed by loading new program
Patent Assignee: EASTMAN KODAK CO (EAST)
Inventor: OLIVER J A
Number of Countries: 003 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2319365	A	19980520	GB 9719882	A	19970919	199822	B
JP 10207703	A	19980807	JP 97259887	A	19970925	199842	
US 5913056	A	19990615	US 96719936	A	19960925	199930	
GB 2319365	B	20010711	GB 9719882	A	19970919	200140	

Priority Applications (No Type Date): US 96719936 A 19960925
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2319365	A		22	G06F-009/445	
JP 10207703	A		8	G06F-009/06	
US 5913056	A			G06F-009/00	
GB 2319365	B			G06F-009/445	

Abstract (Basic): GB 2319365 A
    The reprogramming method involves connecting an administrative computer to a serial cable. The serial cable is then **connected** to the **serial** port on a machine containing the microprocessor. A fist sequence of signals is sent form the administrative computer to the microprocessor to change the microprocessor from a **normal** to a bootstrap **mode** .
    A new program is loaded from the administrative computer to the microprocessor. A second sequence of signals is sent from the administrative computer to the microprocessor to reset it. A reset signal is rescinded prior to loading the new program.
    ADVANTAGE - Provides low cost, simple and reliable interface avoiding use of floppy or tape drive to load data.
    Dwg.8/10
Title Terms: REMOTE; MICROPROCESSOR; REPROGRAMMABLE; SERIAL; PORT; SEND; SIGNAL; SEQUENCE; ADMINISTER; COMPUTER; MICROPROCESSOR; FOLLOW; LOAD; NEW ; PROGRAM
Derwent Class: T01
International Patent Class (Main): **G06F-009/00 ; G06F-009/06 ; G06F-009/445**
File Segment: EPI

32/5/9   (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011444112   **Image available**
WPI Acc No: 1997-422019/199739
Related WPI Acc No: 1998-008295
XRPX Acc No: N97-351511
Data communication system of computer - has communication control unit that controls sending of data between processors through input-output ports
Patent Assignee: SANYO ELECTRIC CO LTD (SAOL)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 9190421	A	19970722	JP 8963091	A	19890314	199739	B

JP 9731984   A   19890314

Priority Applications (No Type Date): JP 8963091 A 19890314; JP 9731984 A
  19890314
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9190421	A		7	G06F-015/80	Div ex application JP 8963091

Abstract (Basic): JP 9190421 A
     The system consists of a number of processors (**PE**) arranged in a
matrix, connected **horizontally** and **vertically** by **horizontal** and
vertical wires respectively. Every processor is connected to four
adjacent processors on all direction with a communication control part,
using four **bi - directional** input-output ports. A memory unit of one
word length is provided. Four input sides of input registers (r) along
with data processing unit forms a unification control circuit and four
output sides of output registers (r) along with data processing unit
forms a branching control circuit.
     A communication control unit obtains data from the processor or
from adjacent processors through the unification control circuit and
controls to send data through the branching control circuit to adjacent
processors.
     ADVANTAGE - Reduces size by limiting number of pins and distance
between processors. Avoids dead lock. Aids in easy mounting.
     Dwg.1/5
Title Terms: DATA; COMMUNICATE; SYSTEM; COMPUTER; COMMUNICATE; CONTROL;
  UNIT; CONTROL; SEND; DATA; PROCESSOR; THROUGH; INPUT; OUTPUT; PORT
Derwent Class: T01
International Patent Class (Main): **G06F-015/80**
International Patent Class (Additional): **G06F-015/16**
File Segment: EPI

 32/5/10   **(Item 10 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

010644236   **Image available**
WPI Acc No: 1996-141190/199615
XRPX Acc No: N96-118201
  **Electronic document viewer - includes navigator which permits display of
  next and remaining sequential portions of article in content flow or
  reverse content flow order**
Patent Assignee: ADOBE SYSTEMS INC (ADOB-N)
Inventor: COHN R J; MCCOY W H; PADGETT A P; WARNOCK J E
Number of Countries: 009 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 701220	A1	19960313	EP 95305286	A	19950728	199615	B
CA 2154951	A	19960313	CA 2154951	A	19950728	199626	
JP 8190547	A	19960723	JP 95234321	A	19950912	199639	
US 5634064	A	19970527	US 94304680	A	19940912	199727	
			US 96693489	A	19960802		
EP 701220	B1	20010704	EP 95305286	A	19950728	200138	
DE 69521575	E	20010809	DE 621575	A	19950728	200153	
			EP 95305286	A	19950728		

Priority Applications (No Type Date): US 94304680 A 19940912; US 96693489 A
  19960802
Cited Patents: 04Jnl.Ref
Patent Details:

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Patent No   Kind Lan Pg   Main IPC      Filing Notes
EP 701220        A1 E   31 G06F-017/21
   Designated States (Regional): DE FR GB IT NL SE
CA 2154951       A          G06F-003/14
JP 8190547       A      49 G06F-017/21
US 5634064       A      28 G06T-001/00   Cont of application US 94304680
EP 701220        B1 E      G06F-017/21
   Designated States (Regional): DE FR GB IT NL SE
DE 69521575      E          G06F-017/21   Based on patent EP 701220
```

Abstract (Basic): EP 701220 A
        The document viewer includes a computer system with digital
    processor, memory which provides memory storage locations accessible by
    the digital processor, a visual output device to provide a visual
    output derived, at least in part, from the digital processor, and an
    input device to provide an input that can be acted upon by the digital
    processor. A document stored in the memory includes article section
    information and section link information describing an ordering of the
    article sections such that the article sections can be accessed in a
    consecutive fashion.
        One of a number of view modes including at least a **normal** view
    mode and an article view **mode** is determined. The **normal** view
    device displays a portion of the document on the visual output device
    in a normal view that does not require the article section information
    and article section link information. The article view device displays
    portions of a selected article in an article view, and permits the
    sequential viewing of consecutive article sections of the selected
    article based upon the section link information.
        ADVANTAGE - Reader can follow thread of article in convenient,
    easily comprehendible fashion.
        Dwg.1/8
Title Terms: ELECTRONIC; DOCUMENT; VIEW; NAVIGATION; PERMIT; DISPLAY;
    REMAINING; SEQUENCE; PORTION; ARTICLE; CONTENT; FLOW; REVERSE; CONTENT;
    FLOW; ORDER
Derwent Class: T01
International Patent Class (Main): **G06F-003/14 ; G06F-017/21 ;**
    G06T-001/00
International Patent Class (Additional): **G06F-017/24**
File Segment: EPI

 32/5/11   (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

010401114   **Image available**
WPI Acc No: 1995-302427/199539
XRPX Acc No: N95-229650
    **Software down-loading system for transferring software from remote
    programmer to Electronic Engine Control unit - enables remote programmer
    to select 1st mode, in which programmer down-loads boot program through
    serial channel into shared memory, 2nd mode, in which CPU executes code
    in shared memory or 3rd mode in which CPU controls serial channel**
Patent Assignee: UNITED TECHNOLOGIES CORP (UNAC)
Inventor: ADAMEC W B; COX R E; GIGANDET S A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5444861	A	19950822	US 92890776	A	19920601	199539	B
			US 94317984	A	19941004		

Search report

Priority Applications (No Type Date): US 92890776 A 19920601; US 94317984 A
  19941004
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
US 5444861   A   8 G06F-015/16   Cont of application US 92890776

Abstract (Basic): US 5444861 A
      A remote programmer communicates with the Electronic Engine Control
  unit through a **serial** communications **link** . The Electronic Engine
  Control unit receives the communications through a serial memory that
  transmits them to a shared memory and on through a central processing
  unit – CPU – to a program memory. A redundant control circuit is
  controlled by the remote programmer and directs the EEC unit through
  three operational modes.
      In a first, or down-load/verify, mode of operation, the EEC unit
  may receive and store a boot program. In a second, or program memory,
  mode, the CPU executes the boot program to allow the CPU to read from
  and/or write to the program memory in response to communications from
  the serial channel. In a third, or **normal** , **mode** of operation, the
  CPU can only read from the program memory and an on-board or host
  computer may replace the remote programmer, so that the CPU executes
  software stored in the program memory in response to communications
  received from the host computer to control multiple actuators on the
  engines, but the host computer cannot access the EEC unit's program
  memory.
      USE/ADVANTAGE – For down-loading, verifying, and/or testing
  software from remote programmer to Electronic Engine Control unit on
  gas turbine engine for controlling engine functions such as fuel supply
  using throttle valve. Uses min. no. of electrical connector fixtures
  within container housing components of unit. Enables software to be
  changed, verified and/or tested without opening container, or removing
  any component. Prevents access to software loaded into program memory
  during ordinary usage of unit.
      Dwg.2/4
Title Terms: SOFTWARE; DOWN; LOAD; SYSTEM; TRANSFER; SOFTWARE; REMOTE;
  PROGRAM; ELECTRONIC; ENGINE; CONTROL; UNIT; ENABLE; REMOTE; PROGRAM;
  SELECT; MODE; PROGRAM; DOWN; LOAD; BOOT; PROGRAM; THROUGH; SERIAL;
  CHANNEL; SHARE; MEMORY; MODE; CPU; EXECUTE; CODE; SHARE; MEMORY; MODE;
  CPU; CONTROL; SERIAL; CHANNEL
Derwent Class: T01; W06
International Patent Class (Main): **G06F-015/16**
International Patent Class (Additional): **G06F-009/06 ; G06F-009/24**
File Segment: EPI

 32/5/12   (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

010346335   **Image available**
WPI Acc No: 1995-247649/199533
XRPX Acc No: N95-192326
  **Field service remote communication system for image setters or copiers -
  uses service centre computer to communicate with image setter to upload
  and download information with the image setter and to instruct it to
  perform diagnostics**
Patent Assignee: BAYER CORP (FARB); MILES INC (MILE)
Inventor: CARLSON G L; VEIGA L F
Number of Countries: 005 Number of Patents: 003
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week

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EP 663623    A2  19950719  EP 94120417  A  19941222  199533  B
JP 7325734   A   19951212  JP 955337    A  19950117  199607
EP 663623    A3  19961030  EP 94120417  A  19941222  199649
```

Priority Applications (No Type Date): US 94182542 A 19940114
Cited Patents: No-SR.Pub; GB 2247540; US 5214772; WO 9213295
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
EP 663623   A2 E 18 G03G-015/00
   Designated States (Regional): BE DE FR GB
JP 7325734   A   11 G06F-011/30
EP 663623   A3   G03G-015/00

Abstract (Basic): EP 663623 A
     The image setter (100) is **connected** via a **serial connection**
(160) to a modem (110), which is connected through a telephone network
connection (140) to another modem (120), which is connected to a field
service computer (130). The computer is operated by a field service
engineer who can be located anywhere in the world. The computer is
housed in a service centre which has a database containing the
telephone numbers of the installed image setters.
     The computer initiates a call to an image setter and a data
connection is established when the computer sends a signal for the
image setter to enter the service **mode** , when it halts **normal**
operations. The computer can then upload and download data to the image
setter with the data being firmware, configuration data or error
information. The image setter can request service and the computer can
instruct the image setter to execute diagnostic testing to determine
the status of the image setter.
     ADVANTAGE - Automatic system which reduces servicing costs.
     Dwg.1/10
Title Terms: FIELD; SERVICE; REMOTE; COMMUNICATE; SYSTEM; IMAGE; SET; COPY;
  SERVICE; CENTRE; COMPUTER; COMMUNICATE; IMAGE; SET; INFORMATION; IMAGE;
  SET; INSTRUCTION; PERFORMANCE; DIAGNOSE
Index Terms/Additional Words: maintenance
Derwent Class: P84; S06; T01; W01; W05
International Patent Class (Main): G03G-015/00; **G06F-011/30**
International Patent Class (Additional): G06T-001/00; G08B-025/08
File Segment: EPI; EngPI

 32/5/13   (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

010106544   **Image available**
WPI Acc No: 1995-007797/199502
XRPX Acc No: N95-006535
  **Shape recognition - comparing point series with master pattern
  represented by node points and connecting line elements**
Patent Assignee: MATSUSHITA ELECTRIC WORKS LTD (MATW)
Inventor: FUJIWARA Y; IKEBUCHI H; MITAKA R; SHOTADASHI K; YOSHISUKE S;
  FIJIWARA Y
Number of Countries: 005 Number of Patents: 007
Patent Family:
```
Patent No    Kind  Date      Applicat No  Kind  Date      Week
DE 4418217   A1  19941201  DE 4418217   A  19940525  199502  B
FR 2705809   A1  19941202  FR 946308    A  19940525  199503
CA 2123530   A   19941127  CA 2123530   A  19940513  199509
US 5546476   A   19960813  US 94242669  A  19940513  199638
DE 4418217   C2  19960926  DE 4418217   A  19940525  199643
```

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CN 1106155      A    19950802   CN 94105487    A    19940526   199730
CA 2123530      C    19990504   CA 2123530     A    19940513   199936
```

Priority Applications (No Type Date): JP 946842 A 19940126; JP 93124508 A
  19930526
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 4418217	A1		49	G06K-009/46	
US 5546476	A		47	G06K-009/46	
DE 4418217	C2		49	G06K-009/46	
CA 2123530	C	E		G06K-009/62	
FR 2705809	A1			G06K-009/46	
CA 2123530	A			G06F-015/70	
CN 1106155	A			G06K-009/00	

Abstract (Basic): DE 4418217 A
      A master shape is represented by a set contg. a limited number of
  node points and line elements which **successively** produce **connections**
   between the node points. A standard value and a tolerance implying the
  standard value are defined w.r.t. a characteristic of each line
  element.
      The degree of coincidence of the shape with the shape pattern is
  determined on the basis of any deviation of the point series of the
  shape from the standard value and the relationship to the tolerance.
      USE/ADVANTAGE - For identifying shape represented by series of
  points in two-dimensional plane by comparison with master shape.
  Enables shape recognition without altering master shape where input
  data are prepared sequentially and individual shapes vary.
      Dwg.1/42
Title Terms: SHAPE; RECOGNISE; COMPARE; POINT; SERIES; MASTER; PATTERN;
  REPRESENT; NODE; POINT; CONNECT; LINE; ELEMENT
Derwent Class: S02; T04
International Patent Class (Main): **G06F-015/70** ; G06K-009/00; G06K-009/46;
  G06K-009/62
International Patent Class (Additional): G01B-011/00; G01B-011/03;
  G01B-011/24; **G06F-015/46** ; G06K-009/50; G06K-009/68; G06T-001/00
File Segment: EPI

 32/5/14   (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

009915185   **Image available**
WPI Acc No: 1994-182895/199422
XRPX Acc No: N94-144464
  **Linear equations calculation method using multiprocessor system -
  involves manipulating matrices and unknown vector values such that
  problem can be solved using vector orthogonalisation techniques**
Patent Assignee: TEXAS INSTR INC (TEXI)
Inventor: GUPTA S; MEHROTRA R
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5319586	A	19940607	US 89458207	A	19891228	199422	B
			US 9318343	A	19930216		

Priority Applications (No Type Date): US 89458207 A 19891228; US 9318343 A
  19930216
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
```

US 5319586    A      11 G06F-015/32    Cont of application US 89458207

Abstract (Basic): US 5319586 A
    The method involves receiving the system of linear equations by the
host processor, the host processor expressing the system of linear
equations as a matrix having rows and **columns** of coefficient values.
Each **row** is equal to a known constant. The coefficient values are
transferred by the host processor to the **processor    array** . The
**processor    array** is controlled to **normalize** a **row** of the matrix,
to obtain a **normalized** vector and to modify the remaining rows of the
matrix to obtain zero constant vectors. The zero constant vectors are
**normalised** with respect to each other and then the **normalized** vector
is orthogonalised with respect to the orthogonalized zero constant
vectors, to obtain a **perpendicular** vector.
    Orthogonalisation is performed by multiple processors of the
**processor    array** . A solution vector is obtained by the **processor
array** as the product of a scaling factor and the **perpendicular**
vector. The host processor receives the solution vector.
    ADVANTAGE - Speeds up solution of system of linear equations and
matrix inversion.
    Dwg.1/5
Title Terms: LINEAR; EQUATE; CALCULATE; METHOD; MULTIPROCESSOR; SYSTEM;
  MANIPULATE; MATRIX; UNKNOWN; VECTOR; VALUE; PROBLEM; CAN; SOLVING; VECTOR
  ; TECHNIQUE
Derwent Class: T01
International Patent Class (Main): **G06F-015/32**
International Patent Class (Additional): **G06F-007/00**
File Segment: EPI


 **32/5/15      (Item 15 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2002  Thomson Derwent. All rts. reserv.

009657558    **Image available**
WPI Acc No: 1993-351110/199344
XRPX Acc No: N93-270888
  **Signal indication switching method for controlling traffic signal
  indicators for control of traffic movements - using linear programming
  solutions for maximum, optimum and minimum cycle lengths and max, optimum
  and min. phase times**
Patent Assignee: MITSUBISHI CORP (MITS  )
Inventor: SAKITA M
Number of Countries: 001  Number of Patents: 001
Patent Family:
Patent No    Kind    Date    Applicat No    Kind    Date    Week
US 5257194    A    19931026  US 91694013    A    19910430  199344  B

Priority Applications (No Type Date): US 91694013 A 19910430
Patent Details:
Patent No  Kind Lan Pg    Main IPC    Filing Notes
US 5257194    A    62 G06F-015/48

Abstract (Basic): US 5257194 A
    The traffic signal local control method is used to automatically
compute, or adjust the signal timing for the prevailing traffic, not
only from the local intersection control standpoint, but also from the
area-wide signal control standpoint, when employed in an area-wide
system of traffic control. The traffic signal local controller includes
the use of time-of-day tables including signal control method, signal
phasing scheme, recall switch, signal timing parameter and **pedestrian**

13

green time coefficient tables. Signal control methods which may be implemented include time-of-day failure **mode** , time-of-day **normal mode** , traffic-responsive and traffic-adaptive methods.

Signal phasing schemes are defined by data included in a transition matrix (P) and in a simultaneous green matrix (Q) included in time-of-day tables. The transition matrix (P) indicates which movement follows another, and the simultaneous green matrix contains data on simultaneous green indications.

USE/ADVANTAGE - Handling on-line real-time basis, many signal control functions performed by central computer and off-line analysis performed by traffic engineer. Flexible enough to accommodate most present, and future, traffic signal control, or optimisation methods.
    Dwg.29/29f
Title Terms: SIGNAL; INDICATE; SWITCH; METHOD; CONTROL; TRAFFIC; SIGNAL; INDICATE; CONTROL; TRAFFIC; MOVEMENT; LINEAR; PROGRAM; SOLUTION; MAXIMUM; OPTIMUM; MINIMUM; CYCLE; LENGTH; MAXIMUM; OPTIMUM; MINIMUM; PHASE; TIME
Derwent Class: T01; T07
International Patent Class (Main): **G06F-015/48**
File Segment: EPI


**32/5/16      (Item 16 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2002  Thomson Derwent. All rts. reserv.

009628595     **Image available**
WPI Acc No: 1993-322144/199341
Related WPI Acc No: 1991-353378; 1991-369435; 1991-369436; 1991-369437; 1992-057025; 1992-160461; 1992-160462; 1992-323593; 1992-323650; 1992-331351; 1993-295576; 1993-328396; 1994-209005; 1994-225588; 1994-255598; 1996-077215; 1996-251377; 1997-192388
XRPX Acc No: N93-248245
  Massively   parallel   processor **for image, multi-media and general purpose computing - has processing element unit** processor   array **structure with single and dual processing elements, using finite difference method of solving differential equations**
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC  )
Inventor: DELGADO-FRIAS J G; PECHANEK G G; VASSILIADIS S; DELGADO-FNIAS J G
Number of Countries: 004  Number of Patents: 005
Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week | |
|---|---|---|---|---|---|---|---|
| EP 564847 | A2 | 19931013 | EP 93104154 | A | 19930315 | 199341 | B |
| EP 564847 | A3 | 19940720 | EP 93104154 | A | 19930315 | 199528 | |
| US 5577262 | A | 19961119 | US 90526866 | A | 19900522 | 199701 | |
| | | | US 91682786 | A | 19910408 | | |
| | | | US 91740266 | A | 19910805 | | |
| | | | US 91740355 | A | 19910805 | | |
| | | | US 91740556 | A | 19910805 | | |
| | | | US 91740568 | A | 19910805 | | |
| | | | US 92864112 | A | 19920406 | | |
| | | | US 94194653 | A | 19940209 | | |
| | | | US 95522163 | A | 19950713 | | |
| US 5612908 | A | 19970318 | US 92864112 | A | 19920406 | 199717 | |
| | | | US 94194364 | A | 19940209 | | |
| US 6405185 | B1 | 20020611 | US 92864112 | A | 19920406 | 200244 | |
| | | | US 95551144 | A | 19950323 | | |

Priority Applications (No Type Date): US 92864112 A 19920406; US 90526866 A 19900522; US 91682786 A 19910408; US 91740266 A 19910805; US 91740355 A 19910805; US 91740556 A 19910805; US 91740568 A 19910805; US 94194653 A 19940209; US 95522163 A 19950713; US 94194364 A 19940209; US 95551144 A

19950323
Cited Patents: No-SR.Pub; 5.Jnl.Ref; EP 456201; GB 2219106; US 4270170; US
  4972361
Patent Details:

| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|---|---|---|---|---|---|
| EP 564847 | A2 | E | 37 | G06F-015/80 | |
| Designated States (Regional): DE FR GB | | | | | |
| EP 564847 | A3 | | | G06F-015/80 | |
| US 5577262 | A | | 31 | G06F-015/00 | CIP of application US 90526866 |
| | | | | | CIP of application US 91682786 |
| | | | | | CIP of application US 91740266 |
| | | | | | CIP of application US 91740355 |
| | | | | | CIP of application US 91740556 |
| | | | | | CIP of application US 91740568 |
| | | | | | Div ex application US 92864112 |
| | | | | | Cont of application US 94194653 |
| | | | | | CIP of patent US 5065339 |
| | | | | | CIP of patent US 5146420 |
| | | | | | CIP of patent US 5146543 |
| | | | | | CIP of patent US 5148515 |
| US 5612908 | A | | 33 | G06F-007/38 | Div ex application US 92864112 |
| US 6405185 | B1 | | | G06F-015/18 | Cont of application US 92864112 |

Abstract (Basic): EP 564847 A
     The apparatus includes a processing element unit **processor     array**
   structure. The **processor     array** structure includes single and dual
   processing elements that contain instruction and data storage units,
   receive instructions and data, and execute instructions.
     The processing elements are interconnected by a processor
   interconnection apparatus. Further components support data
   initialisation, parallel function, wrap-around and broadcast processor
   communications.
     USE/ADVANTAGE - Processor elements can improve image computing and
   improve speed. Apparatus can be used for multi-media and general
   purpose applications, including use of finite difference method of
   solving differential equations.
     Dwg.3A/15
Title Terms: PARALLEL; PROCESSOR; IMAGE; MULTI; MEDIUM; GENERAL; PURPOSE;
  COMPUTATION; PROCESS; ELEMENT; UNIT; PROCESSOR; ARRAY; STRUCTURE; SINGLE;
  DUAL; PROCESS; ELEMENT; FINITE; DIFFER; METHOD; SOLVING; DIFFERENTIAL;
  EQUATE
Index Terms/Additional Words: MIMD; SIMD
Derwent Class: T01
International Patent Class (Main): **G06F-007/38 ; G06F-015/00 ;**
  **G06F-015/18 ; G06F-015/80**
File Segment: EPI


 **32/5/17     (Item 17 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

009116472    **Image available**
WPI Acc No: 1992-243909/199230
XRPX Acc No: N92-186127
    Processor     array **e.g. provided in computer system - has clocked
  buffers provided at each boundary between adjacent modules so as to
  provide communication link for buses**
Patent Assignee: SONY CORP (SONY  )
Inventor: EASTTY P
Number of Countries: 001  Number of Patents: 002

Patent Family:
| Patent No | Kind | Date | Applicat No | Kind | Date | Week | |
|-----------|------|------|-------------|------|------|------|---|
| GB 2251964 | A | 19920722 | GB 91852 | A | 19910115 | 199230 | B |
| GB 2251964 | B | 19940914 | GB 91852 | A | 19910115 | 199434 | |

Priority Applications (No Type Date): GB 91852 A 19910115
Patent Details:
| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|-----------|------|-----|----|----------|--------------|
| GB 2251964 | A | | 24 | G06F-013/40 | |
| GB 2251964 | B | | 2 | G06F-013/40 | |

Abstract (Basic): GB 2251964 A
        The array includes a number of processors (SP) arranged in modules
    or sub-arrays (A, B etc.). Each module includes a rectangular
    configuration of processors, preferably 4 x 4 interconnected by
    **vertical** and **horizontal** buses. Clocked buffers (R) are provided at
    each boundary between adjacent modules so as to provide a communication
    link for the corresponding buses. The **horizontal** and **vertical**
    processor interconnections are effectively split into a number of short
    buses.
        A modularised implementation using processor and buffer cards may
    be used. The clocked buffers are **bidirectional** thus allowing
    communication to take place in either direction across each boundary.
        ADVANTAGE - High operating speed can be maintained, and high
    signal bandwidth provided.
        Dwg.1A/6
Title Terms: PROCESSOR; ARRAY; COMPUTER; SYSTEM; CLOCK; BUFFER; BOUNDARY;
    ADJACENT; MODULE; SO; COMMUNICATE; LINK; BUS
Derwent Class: T01
International Patent Class (Main): **G06F-013/40**
International Patent Class (Additional): **G06F-015/16**
File Segment: EPI


  **32/5/18        (Item 18 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2002  Thomson Derwent. All rts. reserv.

008882041      **Image available**
WPI Acc No: 1992-009310/199202
XRPX Acc No: N92-007155
    **Digital signal processing device for image processing - using linear
    array of one bit processing elements connected by shift registers and
    including serial parallel multipliers**
Patent Assignee: CHEN K (CHEN-I); SVENSSON C M (SVEN-I); GENNUM CORP
    (GENN-N)
Inventor: CHEN K; SVENSSON C M
Number of Countries: 002  Number of Patents: 005
Patent Family:
| Patent No | Kind | Date | Applicat No | Kind | Date | Week | |
|-----------|------|------|-------------|------|------|------|---|
| EP 463721 | A | 19920102 | EP 91303836 | A | 19910426 | 199202 | B |
| CA 2040659 | A | 19911031 | | | | 199204 | |
| EP 463721 | A3 | 19930616 | EP 91303836 | A | 19910426 | 199405 | |
| JP 6089271 | A | 19940329 | JP 9199138 | A | 19910430 | 199417 | |
| CA 2040659 | C | 19960507 | CA 2040659 | A | 19910417 | 199628 | |

Priority Applications (No Type Date): CA 2040659 A 19910417; SE 901556 A
    19900430
Cited Patents: NoSR.Pub; 4.Jnl.Ref; EP 293701
Patent Details:
Patent No  Kind Lan Pg   Main IPC    Filing Notes

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JP 6089271    A    17 G06F-015/16
CA 2040659    C       H04N-005/38
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Abstract (Basic): EP 463721 A
    The video and image signal processing device (1) consists of a
linear array of processing elements (**PE** 's) (2), external controller
interface (4), I/O ports (6) to digitising cameras and display
monitors, and an external memory interface (8). Single instruction
multiple data (SIMD) topology is used incorporating two **modes** of
communication, **horizontal** through shift registers (10,12) to other
PE 's and vertically on a one bit bus within a **PE** .
    There is one **PE** for each digital sample, or pixel, and the **PE**
's include a serial-parallel multiplier (16).
    ADVANTAGE - Cost effective video image processing. (25pp
Dwg.No.1/13
Title Terms: DIGITAL; SIGNAL; PROCESS; DEVICE; IMAGE; PROCESS; LINEAR;
  ARRAY; ONE; BIT; PROCESS; ELEMENT; CONNECT; SHIFT; REGISTER; SERIAL;
  PARALLEL; MULTIPLIER
Derwent Class: T01
International Patent Class (Main): **G06F-015/16** ; H04N-005/38
International Patent Class (Additional): **G06F-013/38** ; **G06F-015/80** ;
  G06T-001/00; H04N-005/14; H04N-007/13
File Segment: EPI

32/5/19   (Item 19 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

008736051   **Image available**
WPI Acc No: 1991-240067/199133
XRPX Acc No: N91-183087
  **Built-in self-test technique for read-only memories - by performing two
  polynomial divisions to provide residue in multiple input shift register
  which is examined for error**
Patent Assignee: AT & T CORP (AMTT); AMERICAN TELEPHONE & TELEGRAPH CO
  (AMTT); AT & T BELL LAB (AMTT)
Inventor: ZORIAN Y
Number of Countries: 008 Number of Patents: 006
Patent Family:
```

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 441518	A	19910814	EP 91300663	A	19910129	199133	B
US 5091908	A	19920225	US 90475524	A	19900206	199211	
EP 441518	A3	19920701	EP 91300663	A	19910129	199333	
EP 441518	B1	19960904	EP 91300663	A	19910129	199640	
DE 69121733	E	19961010	DE 621733	A	19910129	199646	
			EP 91300663	A	19910129		
KR 180520	B1	19990415	KR 911618	A	19910131	200047	

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Priority Applications (No Type Date): US 90475524 A 19900206
Cited Patents: NoSR.Pub; 4.Jnl.Ref
Patent Details:
Patent No  Kind Lan Pg   Main IPC     Filing Notes
EP 441518     A
   Designated States (Regional): DE FR GB IT NL SE
US 5091908    A    10
EP 441518     B1 E  14 G11C-029/00
   Designated States (Regional): DE FR GB IT NL SE
DE 69121733   E       G11C-029/00   Based on patent EP 441518
KR 180520     B1      G11C-029/00
```

Abstract (Basic): EP 441518 A
     The bits of a preselected quotient string are loaded into the n + 1
column of the memory. A polynomial division is performed on the
entire contents of the memory by sequentially shifting out of the bits
in the cells in each successive ROM **row** in a right-to-left direction
into a separate one of the n + 1 inputs of a **bidirectional** multiple
input shift register (18`). A second polynomial division is then
performed by sequentially shifting the bits out of each successive **row**
into the shift register (18`) in a left-to-right direction.
     As each **row** of bits is shifted into the shift register during
the second polynomial division, the register generates a quotient bit
which is exclusively OR`d with a separate one of the quotient bits
stored in the (n + 1) **column** of the memory, allowing for errors in
the memory to be detected.
     ADVANTAGE - Reduced error. (12pp Dwg.No.2/2
Title Terms: BUILD; SELF; TEST; TECHNIQUE; READ; MEMORY; PERFORMANCE; TWO;
  POLYNOMIAL; DIVIDE; RESIDUE; MULTIPLE; INPUT; SHIFT; REGISTER; ERROR
Derwent Class: U11; U13; U14
International Patent Class (Main): G11C-029/00
International Patent Class (Additional): **G06F-011/26**
File Segment: EPI

32/5/20   (Item 20 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

008646277   **Image available**
WPI Acc No: 1991-150306/199121
XRPX Acc No: N91-115416
    Processor   array **system with an SIMD architecture - has sub-array
modules, each module having 32 processing elements, byte-wide arithmetic
unit and multi-byte shift network**
Patent Assignee: AMT HOLDINGS LTD (AMTH-N)
Inventor: HUNT D
Number of Countries: 013 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 428327	A	19910522	EP 90312204	A	19901108	199121	B

Priority Applications (No Type Date): GB 8925721 A 19891114
Cited Patents: EP 191280; US 4144566
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 428327	A				

    Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE

Abstract (Basic): EP 428327 A
     The **processor array** system employing an SIMD architectures
comprises a number of sub-arrays (S1...S4) modules. Each sub-array
includes n=32 processing elements (**PE**). Each processing element is
connected to a local store comprising on-chip memory; each chip is
connected by an m-bit wide path (where m is greater than 1) to a block
region of off-chip memory. The m-bit wide path is selectively
configurable as one bit path to or from each of m processor elements,
or as an m-bit wide path arranged to communicate complete m-bit words
of memory data between the region of off-chip memory and respective
processing elements.
     Each processing element includes a byte-wide arithmetic unit (ALU)
and byte-wide data paths for carrying data between the ALU and the on
chip memory; each processing element further includes a four byte wide

32 bit operand shift network (Q) comprising a byte-wise shift network (Q1), and a bit-wise shift network (Q2) and an output register (Q0). Such **processor array** system is pref. connected to a host processor arranged to address the array as an extension of its own memory, via a scalar processor interface (MCU) for controlling the operation of the array.

USE/ADVANTAGE - Parallel processing computer systems, scan array system with SIMD architecture; significant improvement in performance of system when handling matrices, and corner turning can be carried out in transit between off-chip memory and the processing element using an n bit shift register, and arranging the off-chip memory in **horizontal mode** with a word length equal to number of processing elements. (Dwg.No.1/5)

Title Terms: PROCESSOR; ARRAY; SYSTEM; SIMD; ARCHITECTURE; SUB; ARRAY; MODULE; MODULE; PROCESS; ELEMENT; ARITHMETIC; UNIT; MULTI; BYTE; SHIFT; NETWORK
Derwent Class: T01
International Patent Class (Additional): **G06F-015/80**
File Segment: EPI

32/5/21   (Item 21 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

008607416   **Image available**
WPI Acc No: 1991-111446/199116
XRPX Acc No: N91-085967
  Signal pipelining circuit for sync. vector processor - has input circuitry enabling pipelining of address data and control signals
Patent Assignee: TEXAS INSTR INC (TEXI)
Inventor: BECKER M; CHILDERS J; CHUNG M; MIYAGUCHI H; REINECKE P; BECKER H; MOO T C
Number of Countries: 008   Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 422963	A	19910417	EP 90311266	A	19901015	199116	B
EP 422963	A3	19930630	EP 90311266	A	19901015	199405	
US 5452425	A	19950919	US 89421494	A	19891013	199543	
			US 93163606	A	19931207		
EP 422963	B1	19970514	EP 90311266	A	19901015	199724	
US 5628025	A	19970506	US 89421471	A	19891013	199724	
			US 95483778	A	19950607		
DE 69030704	E	19970619	DE 630704	A	19901015	199730	
			EP 90311266	A	19901015		
US 5765010	A	19980609	US 89421471	A	19891013	199830	
KR 199073	B1	19990615	KR 9016355	A	19901013	200059	

Priority Applications (No Type Date): US 89421487 A 19891016; US 89421471 A 19891013; US 89421494 A 19891013; US 93163606 A 19931207; US 95483778 A 19950607
Cited Patents: 4.Jnl.Ref; EP 317218; US 3566366
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 422963	A				

Designated States (Regional): DE FR GB IT LI

US 5452425	A		88	G06F-009/26	Cont of application US 89421494
EP 422963	B1	E	114	G06F-015/80	

Designated States (Regional): DE FR GB IT NL

US 5628025	A		87	G06F-003/14	Cont of application US 89421471
DE 69030704	E			G06F-015/80	Based on patent EP 422963

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US 5765010    A      G06F-015/00
KR 199073     B1     G06F-015/80
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Abstract (Basic): EP 422963 A
        The SVP device has one bit processor elements controlled in common
by a sequencer, a state machine to enable operation as a parallel
processing device.Each processor element includes a set of input
registers,two sets of register files,a ste of working registers ,an
arithmetic logic unit including a one bit fulll adder subtractor and a
ste of output registers .
        In video applications each processor element operates on ine pixel
of a horizontal scan line and is capable of real-time digital
processing of video signals.Included within the SVP device id input
circuitry enabling pipelining of address, datat and control signals.The
circuitry includes latches and signal coding and decoding circuitry.
ADVANTAGE-HIghly parallel in operation.
        Dwg.1/67
Title Terms: SIGNAL; PIPE; CIRCUIT; SYNCHRONOUS; VECTOR; PROCESSOR; INPUT;
  CIRCUIT; ENABLE; PIPE; ADDRESS; DATA; CONTROL; SIGNAL
Derwent Class: T01
International Patent Class (Main): **G06F-003/14 ; G06F-009/26 ;
  G06F-015/00 ; G06F-015/80**
International Patent Class (Additional): **G06F-009/06** ; G06T-001/20
File Segment: EPI

32/5/22   (Item 22 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

008182044   **Image available**
WPI Acc No: 1990-069045/199010
XRPX Acc No: N90-052850
  Parallel processor array **system for computer - includes array support
  with M-bit wide edge register connected via data path**
Patent Assignee: AMT HOLDINGS LTD (AMTH-N); CAMBRIDGE PARALLEL PROCESSING
  LTD (CAMB-N)
Inventor: HUNT D J
Number of Countries: 014 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 357342	A	19900307	EP 89308611	A	19890824	199010	B
US 5150290	A	19920922	US 89397709	A	19890823	199241	
EP 357342	B1	19960403	EP 89308611	A	19890824	199618	
DE 68926136	E	19960509	DE 626136	A	19890824	199624	
			EP 89308611	A	19890824		

Priority Applications (No Type Date): GB 8820237 A 19880825
Cited Patents: 1.Jnl.Ref; EP 234147; US 3858183; US 4593373
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 357342	A	E	9		

  Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE

US 5150290	A		9	G06F-015/80	
EP 357342	B1	E	10	G06F-015/80	

  Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE

DE 68926136	E			G06F-015/80	Based on patent EP 357342

Abstract (Basic): EP 357342 A
        The **processor array** system includes an n-bit scalar processor
    (2) and an m x m-bit **processor array** (1), m and n being integers,

with m greater than n. The system also includes an array support
circuit (3) which is connected between the scalar processor (2) and the
processor array (1) and communicates data between them. The system
may include an n-bit wide data path linking n-bit scalar processor
registers in the scalar processor to the array support circuit (3)
together with an m-bit wide data path linking the array support (3) to
the **processor array** (1).
   The array support (3) includes a register interface arranged to
interface the n-bit scalar processor registers to the **processor**
array (1). The array support also includes an m-bit wide edge register
(ME) which is connected to the **processor array** via the m-bit wide
data path. The array may employ an SIMD architecture with each of a
number of **single bit** processing elements having associated with it
local store.
       ADVANTAGE - Increased processing power.
     Dwg.1/4
Title Terms: PARALLEL; PROCESSOR; ARRAY; SYSTEM; COMPUTER; ARRAY; SUPPORT;
  BIT; WIDE; EDGE; REGISTER; CONNECT; DATA; PATH
Derwent Class: T01
International Patent Class (Main): **G06F-015/80**
International Patent Class (Additional): **G06F-015/16**
File Segment: EPI

32/5/23   (Item 23 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

007734805   **Image available**
WPI Acc No: 1988-368737/198851
   Communication protocol for public service trunking system - translating
   message protocol and format between site controller and land link and
   between land link and dispatch console
Patent Assignee: GENERAL ELECTRIC CO (GENE); ERICSSON GE MOBILE
  COMMUNICATIONS (TELF); GENERAL ELECTRIC CO LTD (ENGE); ERICSSON GE
  MOBILE COMMUNICATIONS INC (TELF); ERICSSON-GE MOBILE COMMUNICATIONS INC
  (TELF); ERICSSON INC (TELF)
Inventor: CHILDRESS J S; HUGHES H H; GORDON R T; HATTEY D L; NAZARENKO D M;
  YURMAN B; COOPER G M; DISSOSWAY M A; HALL N; SPANGLER F
Number of Countries: 006 Number of Patents: 060
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 8809969	A	19881215	WO 88US1983	A	19880603	198851	B
GB 2206018	A	19881221	GB 8813168	A	19880603	198851	
GB 2206019	A	19881221	GB 8813016	A	19880603	198851	
GB 2206020	A	19881221	GB 8813167	A	19880603	198851	
JP 1004126	A	19890109	JP 88134560	A	19880602	198907	
JP 1004133	A	19890109				198907	
JP 64002435	A	19890106	JP 88135797	A	19880603	198907	
US 4821292	A	19890411	US 8756924	A	19870603	198917	
DK 8803054	A	19890315				198922	
US 4835731	A	19890530	US 8785572	A	19870814	198926	
DK 8803052	A	19890317				198928	
DK 8803053	A	19890317				198928	
DK 8900507	A	19890403				198929	
GB 2215946	A	19890927	GB 892033	A	19890131	198939	
US 4903262	A	19900220	US 8785490	A	19870814	199014	
US 4903321	A	19900220	US 8785663	A	19870814	199014	
US 4905234	A	19900227	US 8756923	A	19870603	199015	
US 4905302	A	19900227	US 8756922	A	19870603	199015	
JP 2500713	W	19900308	JP 88505629	A	19880603	199016	

US 4926496	A	19900515	US 8785491	A	19870814	199024	
CA 1282117	C	19910326				199117	
CA 1283455	C	19910423				199121	
US 5020132	A	19910528	US 89365810	A	19890306	199124	
GB 2206020	B	19910710				199128	
GB 2243273	A	19911023	GB 9110433	A	19910514	199143	
CA 1290401	C	19911008				199148	
GB 2244889	A	19911211	GB 9111268	A	19910524	199150	
GB 2244890	A	19911211	GB 9111269	A	19910524	199150	
CA 1292779	C	19911203				199204	N
GB 2215946	B	19920122				199204	
GB 2243273	B	19920122				199204	
US 5086506	A	19920204	US 89442319	A	19891128	199208	
GB 2247380	A	19920226	GB 9110869	A	19910520	199209	
CA 1295370	C	19920204				199212	
US 5109543	A	19920428	US 89449790	A	19891213	199220	
GB 2206018	B	19920603	GB 8813168	A	19880603	199223	
GB 2206019	B	19920603	GB 8813169	A	19880603	199223	
GB 2244889	B	19920603	GB 8813168	A	19880603	199223	
			GB 9111268	A	19910524		
GB 2244890	B	19920603	GB 8813168	A	19880603	199223	
			GB 9111269	A	19910524		
GB 2247380	B	19920603	GB 8813169	A	19880603	199223	
			GB 9110869	A	19910520		
US 5125102	A	19920623	US 8756922	A	19870603	199228	
			US 90464053	A	19900103		
US 5128930	A	19920707	US 8785572	A	19870814	199230	
			US 89365810	A	19890306		
			US 91666841	A	19910308		
CA 1304132	C	19920623	CA 566663	A	19880512	199231	
CA 1305524	C	19920721	CA 580065	A	19881013	199235	N
US 5175866	A	19921229	US 8757046	A	19870603	199303	
			US 90532164	A	19900605		
US 5206863	A	19930427	US 8785572	A	19870814	199318	
			US 89365810	A	19890306		
			US 91666862	A	19910308		
US 5212724	A	19930518	US 8785572	A	19870814	199321	
			US 89365810	A	19890306		
			US 91666860	A	19910308		
			US 92915769	A	19920721		
US 5265093	A	19931123	US 8785490	A	19870814	199348	
			US 89449790	A	19891213		
			US 92832697	A	19920207		
US 5274837	A	19931228	US 8756922	A	19870603	199401	
			US 90464053	A	19900103		
			US 92860159	A	19920330		
US 5274838	A	19931228	US 8757046	A	19870603	199401	
			US 90532164	A	19900605		
			US 92913906	A	19920716		
CA 1326510	C	19940125	CA 566664	A	19880512	199409	N
			CA 616065	A	19910509		
CA 1336920	C	19950905	CA 616065	A	19910509	199542	N
			CA 616659	A	19930610		
US 5483670	A	19960109	US 8756922	A	19870603	199608	
			US 90464053	A	19900103		
			US 92860159	A	19920330		
			US 93105153	A	19930812		
US 5574788	A	19961112	US 8756922	A	19870603	199651	
			US 90464053	A	19900103		
			US 92860159	A	19920330		
			US 93105153	A	19930812		

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                        US 95425152      A    19950419
KR 9600153    B1  19960103   KR 88831    A    19880130    199905
US 5864762    A   19990126   US 8756922  A    19870603    199911
                        US 90464053      A    19900103
                        US 92860159      A    19920330
                        US 93105153      A    19930812
                        US 95425152      A    19950419
                        US 96697330      A    19960822
KR 9604810    B1  19960413   KR 88830    A    19880130    199914
KR 9609454    B1  19960719   KR 88832    A    19880130    199921
KR 9611123    B1  19960820   KR 882186   A    19880303    199924
JP 3019308    B2  20000313   JP 88128571 A    19880527    200017
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Priority Applications (No Type Date): US 8785663 A 19870814; US 8756922 A
   19870603; US 8756923 A 19870603; US 8756924 A 19870603; US 8757046 A
   19870603; US 8785490 A 19870814; US 8785491 A 19870814; US 8785572 A
   19870814; US 89365810 A 19890306; US 89442319 A 19891128; US 89449790 A
   19891213; US 90464053 A 19900103; US 91666841 A 19910308; CA 580065 A
   19881013; US 90532164 A 19900605; US 91666862 A 19910308; US 91666860 A
   19910308; US 92915769 A 19920721; US 92832697 A 19920207; US 92860159 A
   19920330; US 92913906 A 19920716; CA 616065 A 19910509; CA 616659 A
   19930610; US 93105153 A 19930812; US 95425152 A 19950419; US 96697330 A
   19960822
Cited Patents: US 4422171; US 4511958; US 4549297; US 4672601; US 4672655;
   US 4672658; US 4677656; US 4694473; US 4712214; US 4712229; US 4730348
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 8809969	A	E	224		
Designated States (National): DK GB JP KR					
JP 3019308	B2		53	H04L-001/16	Previous Publ. patent JP 64002435
US 4821292	A		14		
US 4835731	A		118		
US 4903262	A		27		
US 4903321	A		63		
US 4905234	A		52		
US 4926496	A		15		
US 5086506	A		63		
US 5109543	A		24		
GB 2244889	B			H04Q-007/02	Derived from application GB 8813168
GB 2244890	B			H04Q-007/02	Derived from application GB 8813168
GB 2247380	B			H04B-007/14	Derived from application GB 8813169
US 5125102	A		37		Div ex application US 8756922
US 5128930	A		60	H04J-003/26	Div ex application US 8785572
					Div ex application US 89365810
					Div ex patent US 4835731
					Div ex patent US 5020132
US 5175866	A		39	H04B-001/74	Cont of application US 8757046
US 5206863	A		56	G06F-011/10	Div ex application US 8785572
					Div ex application US 89365810
					Div ex patent US 4835731
					Div ex patent US 5020132
US 5212724	A		60	H04M-011/00	Div ex application US 8785572
					Div ex application US 89365810
					Cont of application US 91666860
					Div ex patent US 4835731
					Div ex patent US 5020132
US 5265093	A		25	H04B-001/38	Div ex application US 8785490
					Div ex application US 89449790
					Div ex patent US 4903262
					Div ex patent US 5109543
US 5274837	A		34	H04B-007/14	Div ex application US 8756922

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                                    Div ex application US 90464053
                                    Div ex patent US 4905302
                                    Div ex patent US 5125102
US 5274838    A    35 H04B-001/60   Cont of application US 8757046
                                    Cont of application US 90532164
                                    Cont of patent US 5175866
CA 1326510    C       H04B-007/24   Div ex application CA 566664
CA 1336920    C       H04B-007/15   Div ex application CA 616065
US 5483670    A    35 H04B-007/14   Div ex application US 8756922
                                    Div ex application US 90464053
                                    Div ex application US 92860159
                                    Div ex patent US 4905302
                                    Div ex patent US 5125102
                                    Div ex patent US 5274837
US 5574788    A    36 H04L-009/00   Div ex application US 8756922
                                    Div ex application US 90464053
                                    Div ex application US 92860159
                                    Div ex application US 93105153
                                    Div ex patent US 4905302
                                    Div ex patent US 5125102
                                    Div ex patent US 5274837
                                    Div ex patent US 5483670
US 5864762    A       H04Q-007/28   Div ex application US 8756922
                                    Div ex application US 90464053
                                    Div ex application US 92860159
                                    Div ex application US 93105153
                                    Div ex application US 95425152
                                    Div ex patent US 4905302
                                    Div ex patent US 5125102
                                    Div ex patent US 5274837
                                    Div ex patent US 5483670
                                    Div ex patent US 5574788
GB 2206018    B       H04Q-007/02
GB 2206019    B       H04B-007/14
CA 1304132    C       H04B-007/15
CA 1305524    C       H04B-007/15
KR 9600153    B1      H04L-001/16
KR 9604810    B1      H04B-007/24
KR 9609454    B1      H04B-007/00
KR 9611123    B1      H04B-007/14
```

Abstract (Basic): WO 8809969 A
    The signal communication method comprises sending signals in a
predetermined protocol between the site controller and a down link
trunking card module over a **serial** data **link** . The digital signals
are translated from one protocol to another. The signals in the second
protocol are communicated between the down link trunking card module
and a switch module remote from the site, over another **serial** data
link .
    The second protocol signals are translated into further protocol
signals. These signals are communicated between the switch trunking
card module and the processor.
        USE - In trunk radio repeater system
Title Terms: COMMUNICATE; PROTOCOL; PUBLIC; SERVICE; TRUNK; SYSTEM;
    TRANSLATION; MESSAGE; PROTOCOL; FORMAT; SITE; CONTROL; LAND; LINK; LAND;
    LINK; DISPATCH; CONSOLE
Derwent Class: T01; W01; W02
International Patent Class (Main): **G06F-011/10** ; H04B-001/38; H04B-001/60;
    H04B-001/74; H04B-007/00; H04B-007/14; H04B-007/15; H04B-007/24;
    H04J-003/26; H04L-001/16; H04L-009/00; H04M-011/00; H04Q-007/02;
    H04Q-007/28

International Patent Class (Additional): G08C-025/00; G08C-025/02;
   H01J-007/04; H04B-001/02; H04B-001/40; H04B-003/36; H04B-007/204;
   H04B-007/26; H04B-017/02; H04J-003/22; H04L-011/20; H04L-012/56;
   H04M-003/22; H04Q-007/04; H04Q-009/02
File Segment: EPI

32/5/24   (Item 24 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007713479   **Image available**
WPI Acc No: 1988-347411/198849
XRPX Acc No: N88-263313
   **Parallel data processing array data matrices - is divided into two groups
   each having processor units operating with associated single-** column
   multiple- row **memory groups**
Patent Assignee: EATON CORP (EAYT); APPLIED INTELLIGENT SYSTEMS INC
   (INTE-N)
Inventor: WILSON S S
Number of Countries: 014 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 293700	A	19881207	EP 88108175	A	19880520	198849	B
US 5129092	A	19920707	US 8757128	A	19870601	199230	
EP 293700	B1	19950201	EP 88108175	A	19880520	199509	
DE 3852909	G	19950316	DE 3852909	A	19880520	199516	
			EP 88108175	A	19880520		

Priority Applications (No Type Date): US 8757128 A 19870601
Cited Patents: 5.Jnl.Ref; A3...8942; EP 150449; EP 6748; No-SR.Pub
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
EP 293700   A E 24
   Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE
US 5129092   A   22 G06F-015/80
EP 293700   B1 E 28 G06F-015/76
   Designated States (Regional): DE FR GB NL
DE 3852909   G   G06F-015/76   Based on patent EP 293700

Abstract (Basic): EP 293700 A
        The parallel processing system (9) consists of an array of
   identical individual neighbourhood processing units and an associated
   array of **single** - **bit** -wide memories. The processor units are arranged
   in groups of eight (as 10a-10h) and similarly the memories are arranged
   in corresponding groups (as 13a-13h). The groups of eight processor
   units are linked by connections (11-21) for transferring data between
   the groups. Each group of memories constitutes eight one-bit **column**
   multiple - **row** memories.
        One group of processor units is arranged for operating one
   parallel rows of data from the associated group of memories and for
   operating selectively in parallel on data from any one of the eight
   columns of the associated group of memories. A second group of
   processor units is arranged similarly for operating on data from its
   associated memories.
        ADVANTAGE - Allows fixed array of processors to handle large array
   of data whilst performing operations requiring neighbourhood and global
   data processing
Title Terms: PARALLEL; DATA; PROCESS; ARRAY; DATA; MATRIX; DIVIDE; TWO;
   GROUP; PROCESSOR; UNIT; OPERATE; ASSOCIATE; SINGLE; **COLUMN** ; MULTIPLE;
   ROW ; MEMORY; GROUP

Derwent Class: T01
International Patent Class (Main): **G06F-015/76 ; G06F-015/80**
International Patent Class (Additional): **G06F-007/50 ; G06F-015/06 ;**
G06F-015/62 ; G06K-009/54
File Segment: EPI

32/5/25   (Item 25 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

007550645   **Image available**
WPI Acc No: 1988-184577/198827
XRPX Acc No: N88-141018
   Computer system memory read-out apparatus – has serially – connected
   registers shifting trigger signal with free-running clock signal to
   trigger address register
Patent Assignee: FUJITSU LTD (FUIT)
Inventor: IBI T
Number of Countries: 004   Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 273642	A	19880706	EP 87311070	A	19871216	198827	B
US 5033001	A	19910716	US 87134860	A	19871218	199131	
EP 273642	B1	19930407	EP 87311070	A	19871216	199314	
DE 3785324	G	19930513	DE 3785324	A	19871216	199320	
			EP 87311070	A	19871216		

Priority Applications (No Type Date): JP 86301621 A 19861219
Cited Patents: 1.Jnl.Ref; A3...9004; EP 161639; EP 242572; No-SR.Pub
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 273642	A	E	12		

   Designated States (Regional): DE FR GB

| EP 273642 | B1 | E | 14 | G11C-007/00 | |

   Designated States (Regional): DE FR GB

| DE 3785324 | G | | | G11C-007/00 | Based on patent EP 273642 |

Abstract (Basic): EP 273642 A
       The free-running clock signal (FCLK) is generated by the CPU and a
   gated clock signal is generated based on the free-running clock and on
   a stop signal. The stop signal is maintained at logic zero during a
   normal clock **mode** and at logic one for the single clock mode. In the
   single clock mode, the address register is switched at the instant of
   the appearance of the sixth clock signal (Tim 6) from the gated clock.
       The first AND gate (A1) responds to the sixth clock signal and to
   the selection signal (SELO) from the decoder (DEC) to output the
   trigger signal (TRi) to the second AND gate (A2). Shift registers
   (SR1-3) shift the trigger signal in synchronism with the seventh and
   eight clock pulses of the free running clock to provide the read data
   clock signal (RCLK) to the read data register (RD-REG).
       ADVANTAGE – Shortened read cycle period is achieved to enhance
   computer throughput.
       4/7
Title Terms: COMPUTER; SYSTEM; MEMORY; READ; APPARATUS; SERIAL; CONNECT;
   REGISTER; SHIFT; TRIGGER; SIGNAL; FREE; RUN; CLOCK; SIGNAL; TRIGGER;
   ADDRESS; REGISTER
Derwent Class: T01; U14
International Patent Class (Main): G11C-007/00
International Patent Class (Additional): **G06F-001/04 ; G06F-005/06 ;**
   G06F-013/00 ; G11C-008/00

File Segment: EPI

32/5/26   (Item 26 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007311486
WPI Acc No: 1987-308493/198744
XRPX Acc No: N87-230768
   **Video attribute decoder for colour or monochrome display - has
   dot-broadening circuit and logic for doubling height of characters
   incorporating any number of segments**
Patent Assignee: BULL SA (SELA)
Inventor: LECOURTIER G
Number of Countries: 007 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 244280	A	19871104	EP 87400711	A	19870401	198744	B
FR 2597691	A	19871023				198750	
US 4831369	A	19890516	US 8741008	A	19870421	198923	
EP 244280	B	19900627				199026	
DE 3763466	G	19900802				199032	
ES 2016632	B	19901116				199051	

Priority Applications (No Type Date): FR 865682 A 19860421
Cited Patents: EP 84122; US 4479119
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 244280	A	F	18		

   Designated States (Regional): DE ES GB IT NL

| US 4831369 | A | | 16 | | |
| EP 244280 | B | | | | |

   Designated States (Regional): DE ES GB IT NL

Abstract (Basic): EP 244280 A
      A clock circuit (25), a configuration register (23), a character
   attribute register (22) and a line attribute register (32,33) are
   connected to a decoding circuit (21). This feeds a character masking
   circuit (41) whose output is serialised (40) for a dot broadener (54)
   controlling the multiplexing (50) of background colour and inversion
   signals (52,53) and a character colour signal (51).
      Double-height logic (31) operates on output of the line attribute
   register (32,33) to control the selection lines (LCO-LC3) of a set of
   characters in read-only memory where e.g. 9. x 10 dot matrix character
   representations are stored.
      ADVANTAGE - With choice between 'professional' high-definition
   alphanumeric and videotex semigraphic **modes** , brightness differences
   between **vertical** and horizontal lines are avoided. Characters
   comprising any number of segments can be displayed with double height
   on any type of monitor.
Title Terms: VIDEO; ATTRIBUTE; DECODE; COLOUR; MONOCHROME; DISPLAY; DOT;
   BROADEN; CIRCUIT; LOGIC; DOUBLE; HEIGHT; CHARACTER; INCORPORATE; NUMBER;
   SEGMENT
Derwent Class: P85; T04
International Patent Class (Additional): **G06F-003/15** ; G09G-001/28;
   H04N-005/66
File Segment: EPI; EngPI

32/5/27   (Item 27 from file: 350)

004756267
WPI Acc No: 1986-259608/198640
XRPX Acc No: N86-194081
   **Register providing built-in test facilities for integrated circuit -
   operates in at leas three** modes **including** normal **input-output** mode ,
   shift mode and test mode
Patent Assignee: INT COMPUTERS LTD (INCM)
Inventor: HALE S G; NAVEN F
Number of Countries: 009 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 196171	A	19861001	EP 86301545	A	19860305	198640	B
AU 8655021	A	19860925				198646	
JP 61223675	A	19861004	JP 8664284	A	19860324	198646	
ZA 8601856	A	19860918				198652	
US 4701916	A	19871020	US 86840602	A	19860317	198744	
EP 196171	B	19911116				199145	
DE 3682305	G	19911212				199151	

Priority Applications (No Type Date): GB 8518857 A 19850725; GB 857612 A
   19850323
Cited Patents: 1.Jnl.Ref; A3...8905; EP 111053; EP 148403; GB 2085171;
   No-SR.Pub
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
EP 196171   A E 16
   Designated States (Regional): DE FR GB IT NL
EP 196171   B
   Designated States (Regional): DE FR GB IT NL

Abstract (Basic): EP 196171 B
      The register has a serial input (SDI) which is fed via two test
   control cells (T1,T2) and a multiplexer (12) to a series of eight
   single bit cells (D0 to D7). The parallel data inputs (PD0 to PD7)
   and outputs (D0 to D7) can be connected to the processing element of
   the integrated circuit. The output of an exclusive-OR gate tree (15),
   fed from the outputs of four of the cells, is fed back to the
   multiplexer (12). A control circuit (16) produces signals to control
   the mode switching functions.
      In **normal** RUN **mode** , all ten cells (T1,T2,B0 to B7) operate as
   parallel input/output registers. In SHIFTS mode, the cells are looped
   from input to output, allowing test data to be shifted in or out as
   required. In TEST mode, the test cells (T1,T2) can set the register
   into states which enable it to act as a pseudo-random number generator,
   a test analyser or a digital signature analyser.
      USE/ADVANTAGE - Several registers can be used in VLSI chip to
   provide rapid built-in test facilities. Number of extra input paths to
   the register required to select different modes of operations is
   reduced. (16pp Dwg.No.2/5
Title Terms: REGISTER; BUILD; TEST; FACILITY; INTEGRATE; CIRCUIT; OPERATE;
   LEA; THREE; MODE; NORMAL; INPUT; OUTPUT; MODE; SHIFT; MODE; TEST; MODE
Derwent Class: T01; U11; U13
International Patent Class (Additional): G01R-031/28; **G06F-011/26** ;
   G11C-019/00; G11C-029/00; H01L-021/66; H01L-027/06
File Segment: EPI

   32/5/28   (Item 28 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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004117938
WPI Acc No: 1984-263479/198442
XRPX Acc No: N84-196970
   Dynamic memory accessing controller - operates in data refresh, and
   refresh with error, correction and detection modes and has read write
   mode responding to CPU request
Patent Assignee: ADVANCED MICRO DEVICES INC (ADMI)
Inventor: BRCICH J A; LEVY R J; MADEWELL J; THREEWITT N B
Number of Countries: 012 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 8403968	A	19841011	WO 84US400	A	19840314	198442	B
EP 138964	A	19850502	EP 84901514	A	19840314	198518	
JP 60500979	W	19850627	JP 84501428	A	19840314	198532	
US 4542454	A	19850917	US 83480996	A	19830330	198540	
EP 138964	B	19900131				199005	
DE 3481236	G	19900308				199011	

Priority Applications (No Type Date): US 83480996 A 19830330
Cited Patents: 4.Jnl.Ref; US 4183096; US 4319356; US 4369510; US 4380812;
   US 4412314
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 8403968	A	E			

   Designated States (National): JP
   Designated States (Regional): AT BE CH DE FR GB LI NL SE

EP 138964	A	E			

   Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

EP 138964	B	E			

   Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

Abstract (Basic): WO 8403968 A
      The controller controls access to a memory under four modes. The
   controller receives address data from a CPU and produces memory access
   address data. A timing controller controls the dynamic memory
   controller (DMC). A 2-bit mode control (MC) word with bits
   060(and!MCq!ar e!reci)
      EP 138964 A
   A controller for accessing a dynamic memory (14) having a plurality
   of banks (B0-B3), and a plurality of rows and a plurality of columns
   for each of the plurality of banks (B0-B3), the memory (14) storing
   data which are subject to being refreshed and to data bit errors, said
   controller having a read/write mode and a refresh mode and a refresh
   with error detection and correction mode, comprising: (a) a latch (56)
   for storing first address data for addressing the memory (14) for the
   read/write mode, the first address data having a first row address
   portion (52R), a first column address portion (52C) and a first bank
   address portion (52B), (b) means (44,38) for carrying a row address
   strobe input (RAS1), a column address strobe input (CAS1), a mode
   control input (54) identifying any one said mode and a multiplexer
   select input (MSEL); (c) an address counter (58) responsive to said
   mode control input (54) and said row address strobe input (RAS1) for
   generating second address data for addressing the memory (14) for the
   refresh mode and the refresh with error detection and correction mode,
   the second address data having a second row address portion, a second
   column address portion and a bank address portion, (d) multiplexer
   means (70), responsive to said mode control input (54) and said
   multiplexer select input (MSEL) for outputting to the memory (14) the

first row address portion and the first column address portion for the
read/write **mode** or the second **row** address portion and the second
column address portion for the refresh mode or the refresh with error
detection and correction **mode** , (e) **row** address strobe decoder means
(88) responsive to said first bank address portion (52B), said mode
control input (54) and said row address strobe input (RAS1), for
producing and outputting to the memory (14) any one of a
Title Terms: DYNAMIC; MEMORY; ACCESS; CONTROL; OPERATE; DATA; REFRESH;
  REFRESH; ERROR; CORRECT; DETECT; MODE; READ; WRITING; MODE; RESPOND; CPU;
  REQUEST
Derwent Class: T01
International Patent Class (Additional): **G06F-011/00 ; G06F-012/16 ;**
  G11C-007/00; G11C-011/34
File Segment: EPI

32/5/29   (Item 29 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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004045439
WPI Acc No: 1984-190981/198431
XRPX Acc No: N84-142726
  **Digital polarity correlator integrated circuit - implements mathematical
  functions using comparator, delaying shift register and counter**
Patent Assignee: NAT RES DEV CORP (NATR)
Inventor: BLACKLEY W S; JACK M A; JORDON J R
Number of Countries: 002 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2133908	A	19840801	GB 8414	A	19840103	198431	B
GB 2133908	B	19860806	GB 8414	A	19840103	198632	
US 4602349	A	19860722	US 84569894	A	19840111	198632	

Priority Applications (No Type Date): GB 836797 A 19830311; GB 83699 A
  19830119; GB 8414 A 19840103
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2133908	A		9		

Abstract (Basic): GB 2133908 A
    A self-testing facility is provided in a correlator comprising a
delaying shift register whose stages are respectively associated with a
set of channels each incorporating a coincidence detector and an
integrating counter. A further shift register is provided which is used
to inspect for the overload condition of the counters, the normal
running condition involving application of binary signals respectively
to the delaying shift register and to all the coincidence detectors.
    The operation of each channel is tested in a **mode** involving
inhibition of **normal** running condition, and information indicative of
faulty channels is recorded in a register. This information is used in
the normal running condition to cause by-passing of those stages of the
shift registers corresponding to faulty channels.
    ADVANTAGE - Uses NMOS technology to achieve over 100 parallel
stages of correlation on single chip.
    0/5
Title Terms: DIGITAL; POLARITY; CORRELATE; INTEGRATE; CIRCUIT; IMPLEMENT;
  MATHEMATICAL; FUNCTION; COMPARATOR; DELAY; SHIFT; REGISTER; COUNTER
Derwent Class: T01
International Patent Class (Additional): **G06F-007/02 ; G06F-011/20 ;**
  G06F-015/33

File Segment: EPI

32/5/30   (Item 30 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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003609546
WPI Acc No: 1983-F7742K/198317
XRPX Acc No: N83-075336
  **Multi-dimensional data processing computer - simultaneously processes
  large number of parallel signals to enable high speed processing of
  parallel data arrays**
Patent Assignee: NAT AERO & SPACE ADMIN (USAS)
Inventor: FROSCH R A
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
US 4380046   A   19830412   198317 B

Priority Applications (No Type Date): US 7941143 A 19790521
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
US 4380046   A   15

Abstract (Basic): US 4380046 A
      The appts. processes multidimensional data with strong spatial
  characteristics, such as raw image data, characterized by a large
  number of parallel data streams in an ordered array. The appts.
  comprises a large number (e.g. 18,384 in a 128 x 128 array) of parallel
  processing elements operating simultaneously and independently on
  single bit slices of a corresp. array of incoming data streams under
  control of a single set of instructions.
      Each of the processing elements comprises a **bidirectional** data
  bus in communication with a register for storing **single bit** slices
  together with a random access memory unit and associated circuitry,
  including a binary counter. The shift register device, for performing
  logical and arithmetical computations on the bit slices, and an I/O
  unit for interfacing the **bidirectional** data bus with the data stream
  source. The **massively parallel processor** architecture enables
  very high speed processing of large amounts of ordered, parallel data,
  including spatial translation by shifting or sliding of bits
  vertically or **horizontally** to neighbouring processing elements.
      1/15
Title Terms: MULTI; DIMENSION; DATA; PROCESS; COMPUTER; SIMULTANEOUS;
  PROCESS; NUMBER; PARALLEL; SIGNAL; ENABLE; HIGH; SPEED; PROCESS; PARALLEL
  ; DATA; ARRAY
Derwent Class: T01; W02; W04
International Patent Class (Additional): **G06F-015/16**
File Segment: EPI

32/5/31   (Item 31 from file: 347)
DIALOG(R)File 347:JAPIO
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06562657   **Image available**
COORDINATE INPUT DEVICE ADAPTABLE TO USB SUSPEND MODE

PUB. NO.:   2000-148390 [JP 2000148390 A]
PUBLISHED: May 26, 2000 (20000526)

Search report

INVENTOR(s): WATANABE KAZUHIRO
APPLICANT(s): FUJITSU TAKAMISAWA COMPONENT LTD
APPL. NO.: 10-316419 [JP 98316419]
FILED: November 06, 1998 (19981106)
INTL CLASS: **G06F-003/033**

ABSTRACT
PROBLEM TO BE SOLVED: To provide a coordinate input device adaptable to a USB suspend mode that reduces the current consumption in the suspend mode and does not impair the responsiveness during the time in the suspend mode.

SOLUTION: Light emitting diodes 16 and 18 of X, Y axis encoders 21 and 22 are **serially connected** and are connected with a DC current source Vcc via a first current control circuit 24 and a second current control circuit 25. When a measured value of a counter in a control part 23 is changed, the coordinate input device is regarded as in a **normal mode** and the current is supplied to the light emitting diodes 16, 18 via the first current control circuit 24. When the measured value of the counter in the control part 23 is not changed, the coordinate input device is regarded as in the suspend mode and the current to be supplied to the light emitting diodes 16, 18 is reduced by the second current control circuit 25.

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32/5/32   (Item 32 from file: 347)
DIALOG(R)File 347:JAPIO
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06097663   **Image available**
TEST CIRCUIT

PUB. NO.: 11-039182 [JP 11039182 A]
PUBLISHED: February 12, 1999 (19990212)
INVENTOR(s): SHIRATA SHUICHI
APPLICANT(s): MITSUBISHI ELECTRIC CORP
APPL. NO.: 09-188780 [JP 97188780]
FILED: July 14, 1997 (19970714)
INTL CLASS: **G06F-011/22 ; G06F-011/22** ; G01R-031/28; H01L-027/04; H01L-021/822

ABSTRACT
PROBLEM TO BE SOLVED: To reduce an excess load to a burn in device by providing a pull up resistance changing means to short-circuit an interval between a first resistance and a test terminal when output potential of an inverter is at an L level, to shield the interval and to define a pull up resistance as flue first resistance, or the first and a second resistances at an H level.

SOLUTION: When a microcomputer is used at a **normal** operation **mode** , the potential of a gate terminal 6a of a P channel transistor 6 shows the L level. For this reason, the P channel transistor is turned on, a drain terminal 6b and a source terminal 6c are conducted and a resistance 5 and the test terminal 2 are short-circuited. As a result, the pull up resistance is defined as the resistance 5. When the microcomputer is used at a test mode, the potential of the gate terminal 6a of the P channel transistor 6 shows the H level. For this reason, the P channel transistor 6 is turned off and the drain terminal 6b and the source terminal 6c are shielded. As the result, the pull up resistance is defined as the resistance 5 + a resistance 7 since the resistance 5 and the resistance 7 are **serially connected** .

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32/5/33   (Item 33 from file: 347)
DIALOG(R)File 347:JAPIO
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04531977   **Image available**
FIFO BUFFER DIAGNOSTIC CIRCUIT

PUB. NO.:   06-175877 [JP 6175877 A]
PUBLISHED: June 24, 1994 (19940624)
INVENTOR(s):   KIMURA ETSUZO
APPLICANT(s):   NEC ENG LTD [329822] (A Japanese Company or Corporation), JP
                 (Japan)
APPL. NO.:   04-206375 [JP 92206375]
FILED: August 03, 1992 (19920803)
INTL CLASS: [5] **G06F-011/22**
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units)
JOURNAL: Section: P, Section No. 1806, Vol. 18, No. 516, Pg. 31,
                 September 28, 1994 (19940928)

ABSTRACT
PURPOSE: To easily diagnose a FIFO buffer formed inside an integrated
circuit in a short time.

CONSTITUTION: At the time of a diagnostic mode, a diagnostic signal Sd is
supplied to an input terminal 102. A mode setting signal Sm for setting the
diagnostic **mode** or a **normal mode** is supplied to an input terminal
103. Input switching circuits 21-24 are provided on the input side of
flip-flops 11-14 constituting a FIFO buffer 10. When the mode setting
signal Sm shows the diagnostic mode, the input switching circuits 21-24
select the diagnostic signal Sd and when the **normal mode** is shown, the
flip-flops 11-14 are **serially connected** . An AND circuit 30 ANDs output
signals S1-S4 from the respective flip-flops 11-14 and outputs the result
as a signal Sa. An OR circuit 40 ORs output signals from the flip-flops
11-14 and outputs the result as a signal Sb. An arithmetic result switching
circuit 50 selects either of the signals Sa and Sb corresponding to the
diagnostic signal Sd.

32/5/34   (Item 34 from file: 347)
DIALOG(R)File 347:JAPIO
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03930853   **Image available**
PARALLEL DATA PROCESSOR WITH BUILT-IN TWO-DIMENSIONAL ARRAY OF ELEMENT
PROCESSOR AND SUB-ARRAY UNIT OF ELEMENT PROCESSOR

PUB. NO.:   04-295953 [JP 4295953 A]
PUBLISHED: October 20, 1992 (19921020)
INVENTOR(s):   KONDO TOSHIO
APPLICANT(s):   NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese
                 Company or Corporation), JP (Japan)
APPL. NO.:   03-082968 [JP 9182968]
FILED: March 25, 1991 (19910325)
INTL CLASS: [5] **G06F-015/16**
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 45.1
                 (INFORMATION PROCESSING -- Arithmetic Sequence Units)
JOURNAL: Section: P, Section No. 1496, Vol. 17, No. 107, Pg. 51, March

33

04, 1993 (19930304)

ABSTRACT

PURPOSE: To improve the transfer capacity and to execute the 90 degree rotation at a high speed by providing an inter-adjacent element processor transfer line of one bit width, and a transfer line of plural bit width connected in a double-level between the left end and the right end of a row, in the **column** direction and the row direction, respectively, in a matrix consisting of element processors.

CONSTITUTION: A **processor array** part 3 consisting of element processors (**PE**) 10 is connected to a data bus through **bidirectional** buffers 8, 9. In the **column** direction of the **PE** 10, an inter-adjacent **PE** transfer line of one bit width is provided. In the **row** direction of the **PE** 10, a transfer line of plural bit width connected in a double- level between the left end and the right end of the **row** is provided. By the double-level connection, and enlargement of bit width of the transfer line in the **row** direction, the transfer capacity in the **row** direction in a one-dimensional operation mode is improved. Also, one-dimensional array data can directly be delivered to the outside of the **processor array** part 3. Also, the data can be delivered between a transfer system in the **row** direction and a transfer system in the **column** direction, and the 90 degree rotation is easily executed.

32/5/35   (Item 35 from file: 347)
DIALOG(R)File 347:JAPIO
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03923559   **Image available**
PROCESSOR   ARRAY

PUB. NO.:	04-288659 [JP 4288659 A]
PUBLISHED:	October 13, 1992 (19921013)
INVENTOR(s):	PIITAA IISUTEI
APPLICANT(s):	SONY CORP [000218] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.:	04-005598 [JP 925598]
FILED:	January 16, 1992 (19920116)
PRIORITY:	9100852 [GB 91852], GB (United Kingdom), January 15, 1991 (19910115)
INTL CLASS:	[5] **G06F-015/16 ; G06F-013/38 ; G06F-013/40**
JAPIO CLASS:	45.4 (INFORMATION PROCESSING -- Computer Applications); 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units); 45.2 (INFORMATION PROCESSING -- Memory Units)
JOURNAL:	Section: P, Section No. 1492, Vol. 17, No. 90, Pg. 67, February 23, 1993 (19930223)

ABSTRACT

PURPOSE: To easily extend a **processor array** without reducing the processing speed by providing plural processor modules and buffers connecting adjacent modules.

CONSTITUTION: Processors SP in each of processor modules A, B, E, and F are arranged in a matrix of 4X4. Processors SP in each module communicate with one another through **vertical** busses VB and **horizontal** busses HB. Busses VB and HB receive supply of a clock signal at regular intervals synchronously with one another. **Bidirectional** clock buffers R are provided on boundaries of adjacent modules and connect corresponding busses of adjacent modules. Modules communicate with one another through buffers R controlled by the clock. Though modules are added to extend the **processor**

array , the processing speed of each module is not reduced because length of busses in modules is fixed.

32/5/36   (Item 36 from file: 347)
DIALOG(R)File 347:JAPIO
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02580320   **Image available**
NORMALIZING CIRCUIT

PUB. NO.:   63-197220 [JP 63197220 A]
PUBLISHED: August 16, 1988 (19880816)
INVENTOR(s):   UEDA KATSUHIKO
APPLICANT(s):   MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
                 or Corporation), JP (Japan)
APPL. NO.:   62-030317 [JP 8730317]
FILED: February 12, 1987 (19870212)
INTL CLASS: [4] **G06F-007/00**
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units)
JOURNAL: Section: P, Section No. 801, Vol. 12, No. 480, Pg. 162,
                 December 15, 1988 (19881215)

ABSTRACT

PURPOSE: To avoid such a case where the normalizing result is equal to
$-2(\sup n)$ by performing the left shift by an extent equal to the value
obtained by subtracting '1' from the output of a 1st means when the output
of a 2nd means is equal to '1'.
CONSTITUTION: A shifter control circuit A11 outputs the control outputs
$L(\sub 0)$, $L(\sub 1)$ and $L(\sub 2)$ to a table 1 (not shown here) with the
output of a register 10 defined as an input based on the input/output
relation. A shifter control circuit B12 outputs the control output R based
on the input/output relation shown in a table 2 (not shown here). Then a
left 1-bit shifter 14 controlled by the output $L(\sub 0)$ is added together
with a left 2-bit shifter 15 controlled by the output $L(\sub 1)$, a left
4-bit shifter 16 controlled by the output $L(\sub 2)$, and a right 1-bit
shifter 13 controlled by the output R. The data shown in a table 2 is
shifted left by an extent equal to the value subtracting a **single   bit**
 and therefore can be normalized in an equivalent way as the shift **mode**
 of a conventional **normalizing** circuit in a state where a negative number
is expressed in a compliment of '2'. It is not needed to use a subtractor
that calculates a left shift number reduced by a **single   bit** . Thus, a
normalizing action is performed at a high speed.

32/5/37   (Item 37 from file: 347)
DIALOG(R)File 347:JAPIO
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02546679   **Image available**
GRAPHIC BOUNDARY VECTOR GENERATING CIRCUIT

PUB. NO.:   63-163579 [JP 63163579 A]
PUBLISHED: July 07, 1988 (19880707)
INVENTOR(s):   FUJIOKA YOICHI
APPLICANT(s):   SEIKO INSTR & ELECTRONICS LTD [000232] (A Japanese Company or
                 Corporation), JP (Japan)
APPL. NO.:   61-314960 [JP 86314960]
FILED: December 25, 1986 (19861225)
INTL CLASS: [4] **G06F-015/66**
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)

JOURNAL: Section: P, Section No. 786, Vol. 12, No. 431, Pg. 68,
                November 15, 1988 (19881115)

ABSTRACT

PURPOSE: To attain high speed processing by successively reading the picture elements of a two-dimensional picture memory in which a graphic picture whose contour is being extracted is stored in an X direction or a Y direction and sequentially storing a start point and end point address on which the picture elements are present on a memory capable of reading from a main computer in a pipeline mode.

CONSTITUTION: An address generating circuit indicated for a picture element unit is added, a series of the start point and end point addresses of the picture elements having a **straight line** continuity in **horizontal** and **vertical** directions are detected by the use of a simple circuit constituted of address counters 4, 5, a -1 circuit 7 and a coincidence detector 8 or the like and **successively connected** to a start point and end point address storing memory 9 in the pipeline mode. Namely, when an operation command is issued from the main computer, this circuit generates a picture element address at high speed, detects the start point and end point addresses of the successive picture elements and successively stores in the memory capable of reading from the main computer. Thereby, the main computer may process only the data in the start point and the end point address storing memory 9 when the operation of this circuit is completed.

32/5/38   (Item 38 from file: 347)
DIALOG(R)File 347:JAPIO
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02324121   **Image available**
INFORMATION INPUT DEVICE

PUB. NO.:   62-241021 [JP 62241021 A]
PUBLISHED: October 21, 1987 (19871021)
INVENTOR(s):   MIYAGISHIMA TAKAO
APPLICANT(s):   OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or
                Corporation), JP (Japan)
APPL. NO.:   61-082387 [JP 8682387]
FILED: April 11, 1986 (19860411)
INTL CLASS: [4] **G06F-003/033 ; G06F-003/03**
JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units)
JOURNAL: Section: P, Section No. 687, Vol. 12, No. 112, Pg. 79, April
                09, 1988 (19880409)

ABSTRACT

PURPOSE: To avoid such a case where an information input device is unavailable as a whole by reediting again the contents to be displayed on a display screen if a touch sensor has a defective element.

CONSTITUTION: When a initial action instruction is delivered, a control part 8 of a touch sensor decides the defective state of an element. The defect of a **single bit** or so is neglected and a rise is given to a system. If it is impossible to neglect the defect area, the commands are given to a main control part 6 from the part 8 and a control part 10 to reedit the display contents of a display screen 9. For instance, the displays are switched between an input part and an operation explaining part or the position of the input part is shifted to avoid the coincidence between the input part and the defect area. In case such a reediting action is impossible, an information input device has an error. While the present screen is registered as it is when the input part is not coincident with

the defect area. Thus it is possible to perform the self-diagnosis to detect the position of a defective element through comparison with the screen of a **normal mode** .

32/5/39   (Item 39 from file: 347)
DIALOG(R)File 347:JAPIO
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01866318   **Image available**
SELF-CHECK CIRCUIT OF TRANSPARENT ELECTRODE TOUCH PANEL

PUB. NO.:   61-080418 [JP 61080418 A]
PUBLISHED: April 24, 1986 (19860424)
INVENTOR(s):   YAMADA MITSUO
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
               (Japan)
APPL. NO.:   59-201682 [JP 84201682]
FILED: September 28, 1984 (19840928)
INTL CLASS: [4] **G06F-003/03**
JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units)
JOURNAL: Section: P, Section No. 492, Vol. 10, No. 254, Pg. 65, August
               30, 1986 (19860830)

ABSTRACT
PURPOSE: To improve the reliability of the titled check circuit by connecting an optional resistance to X and Y electrodes respectively and applying a signal of -V to an electrode at the side of a drive circuit from a self-check control circuit to actuate a receiving circuit and to detect the disconnection of a transparent electrode.

CONSTITUTION: In a self-check mode, a current flows to Y electrodes 51-54 from a control circuit 10 via a drive circuit 2 and resistances 71-77 for self- check circuits. Then a receiving circuit 3 is actuated. The voltage -V which flows a current is applied for **sequential connections** secured among X electrodes 61-64 and Y electrodes 51-54 respectively. Then the circuit 3 for electrodes 61-64 is actuated to check the disconnection of those electrodes 51-54 and 61-64. The current flows to the resistances 71-77 even in a **normal** operation **mode** . This current, however, is very small and therefore the circuit 3 is not actuated to produce no problem. Then the switching is possible between the normal operation and self-check modes by a control switch circuit 11 which is actuated by a signal (a) .

32/5/40   (Item 40 from file: 347)
DIALOG(R)File 347:JAPIO
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00985964   **Image available**
SINGLE ERROR CORRECTING AND DOUBLE ERROR DETECTING CIRCUIT

PUB. NO.:   57-136264 [JP 57136264 A]
PUBLISHED: August 23, 1982 (19820823)
INVENTOR(s):   HIRAOKA TAKASHI
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
               (Japan)
APPL. NO.:   56-021487 [JP 8121487]
FILED: February 18, 1981 (19810218)
INTL CLASS: [3] **G06F-011/10** ; G11C-029/00
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units);
               45.2 (INFORMATION PROCESSING -- Memory Units)

Search report

ABSTRACT
PURPOSE: To inform the information of the occurrence of a **single bit**
error to the outside when necessary by means of the signal which decides
whether or not the above-mentioned information should be informed to the
outside.

CONSTITUTION: In case the information on a single error is required for an
inspection of a main storage, a set signal is transmitted and set to an S-R
type flip flop circuit 33 from a CPU. As a result, an AND gate 34 is
capable of delivering an output, and the single error information to be fed
to an error correcting circuit 32 is trnamitted to the CPU from a readout
information inspecting circuit 31 via an AND gate 34 and an OR gate 35. On
the other hand, the circuit 33 is reset in the **normal** operation **mode** .
As a result, the gate 34 is incapable of delivering an output, and the
error information is not sent to the CPU but processed within a single
error correcting and double error detecting circuit.

32/5/41   (Item 41 from file: 347)
DIALOG(R)File 347:JAPIO
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00571957   **Image available**
ADDITIONAL PROCESSOR

ABSTRACT
PURPOSE: To realize a direct fault diagnosis for the additional processor
based on the soft ware order by dividing the actions of the central
processor and the additional processor into the **normal mode** and the
test mode and then switching the both modes via the software order.

CONSTITUTION: When the order is drawn out of memory device 3 by CPU1 and
decoded as the **normal mode** , **mode** switch holding circuit 10 is set to
the **normal mode** . And at the same time, the **normal mode** information
plus the additional processor action start information are transferred to
additional processor 2. These information are then given to control circuit
22 to execute and process the additional **processor order** to device 3.
In the test mode, circuit 10 is set to the test mode, and at the same time
the test information is transferred to processor 2. This test information
is stored in mode switch holding circuit 20, and then the diagnosis is
given to each part of the additional processor in the test mode.

```
Set     Items    Description
S1      49195    MASSIVELY()PARALLEL()PROCESSOR? OR MPP OR PLURALITY()PROCE-
                 SSING()ELEMENT? OR PPE OR PE OR PROCESSOR()(ARRAY? OR ARRANGE-
                 MENT? OR ORDER OR FORMATION)
S2      24995    (SERIAL? OR CONSECUTIVE? OR SUCCESSIVE? OR SEQUENTIAL?)(2N-
                 )(CONNECT? OR LINK?) OR SINGLE()BIT
S3       4365    MODE?(3N)(VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUM-
                 N?)
S4      16290    MODE?(3N)(HORIZONTAL? OR ROW OR NORMAL?)
S5       1303    MODE?(3N)(BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DI-
                 RECTION? OR PERPENDICULAR? OR STRAIGHT()LINE)
S6        467    VERTICAL()(MEMORY OR STORE? OR STORAGE OR ROM)
S7     469376    VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUMN?
S8     718794    HORIZONTAL? OR ROW OR NORMAL?
S9     248409    BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DIRECTION? OR -
                 PERPENDICULAR? OR STRAIGHT()LINE
S10         0    S1 (S) S2 (S) S3 (S) S4 (S) S5 (S) S6
S11       111    S1 (S) S2
S12         0    S3 (S) S4 (S) S5 (S) S6
S13         9    S3 (S) S4 (S) S5
S14        10    S1 (S) S6
S15         7    S2 (S) S6
S16         7    S11 (S) S3
S17        10    S11 (S) S4
S18         3    S11 (S) S5
S19         0    S11 (S) S6
S20        36    S13 OR S14 OR S15 OR S16 OR S17 OR S18
S21        23    S20 AND IC=G06F?
S22     72960    S1 OR S2
S23       113    S22 (S) S7 (S) S8 (S) S9
S24        25    S23 AND IC=G06F?
S25        21    S24 NOT S20
S26        44    S21 OR S25
S27        44    IDPAT (sorted in duplicate/non-duplicate order)
S28        44    IDPAT (primary/non-duplicate records only)
File 348:EUROPEAN PATENTS 1978-2002/Jul W03
         (c) 2002 European Patent Office
File 349:PCT FULLTEXT 1983-2002/UB=20020725,UT=20020718
         (c) 2002 WIPO/Univentio
```

28/5,K/1   (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01134339
Document image processing apparatus for processing line portions manually
    input to document image, method therefor, and computer readable
    recording medium recorded with document image processing program
    therefor
Apparat und Verfahren zum Verarbeiten von Dokumentbildern fur das
    Nachbearbeiten von per Hand in das Dokumentbild eingegeben Linien und
    computerlesbares Speichermedium mit darauf gespeicherten
    Bearbeitungsprogramm
Appareil et methode de traitement d'images de documents pour retoucher des
    lignes entrees a la main dans l'image de document et medium
    d'enregistrement lisible par ordinateur avec le programme enregistre
PATENT ASSIGNEE:
  Sharp Kabushiki Kaisha, (2795030), 22-22, Nagaike-cho Abeno-ku, Osaka-shi
    Osaka, (JP), (Applicant designated States: all)
INVENTOR:
  Kanemoto, Yuko, 192-15, Mikasa, Tawaramoto-cho, Shiki-gun, Nara, (JP)
  Hirosawa, Masashi, 212 Raporu Senzai, 266-1, Sugimoto-cho, Tenri-shi,
    Nara, (JP)
  Yamanoue, Masafumi, 3-28-302, Kujohirano-cho, Yamatokoriyama-shi, Nara,
    (JP)
LEGAL REPRESENTATIVE:
  MULLER & HOFFMANN Patentanwalte (101521), Innere Wiener Strasse 17, 81667
    Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 990994 A2 000405 (Basic)
APPLICATION (CC, No, Date):   EP 99119466 990930;
PRIORITY (CC, No, Date): JP 98279226 981001
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
    LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: **G06F-017/24 ; G06F-017/21**

ABSTRACT EP 990994 A2
    A document image processing apparatus has the following construction in
    order to draw a manually input line portion along a desired character
    string in a document image in good style and high operability. More
    specifically, the image data (36D) of a document read by a scanner (1A)
    is displayed at a display portion (2). At this time, when the user
    operates a tablet (3A) to manually draw a line portion (L) along a
    desired character string in the displayed document (S2), a row region
    (LE1) along which the manually input line portion is drawn is extracted
    from the region of the document image by a row extracting portion (4)
    based on positional information represented by the input data (36A) of
    the manually drawn line portion and the document image data. The manually
    drawn line portion is corrected into a straight line along the extracted
    row region for display by curve correcting portion (5).
ABSTRACT WORD COUNT: 154
NOTE:
  Figure number on first page: 1A

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 20000405 A2 Published application without search report
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A (English) 200014   1174
       SPEC A   (English) 200014   11209

Total word count - document A   12383
Total word count - document B   0
Total word count - documents A + B   12383

INTERNATIONAL PATENT CLASS: **G06F-017/24** ...

... **G06F-017/21**
...SPECIFICATION Y-direction is taken, a character region CE1 for each
character is finally detected (see Fig. 7F).
    Row region extracting portion 9 extracts a **row** region based on the
direction of the input data 36A of free curve L for image data 36D in
processing region **PE** . As an example of the method of extracting a **row**
region, projections XSD and YSD of each character region CE1 in the X-
and Y- directions may be used. According to this method, a projection is
taken in the direction **perpendicular** to the direction of input data 36A
for information on each character region CE1, a **row** region (or a
column region) can be extracted. More specifically, let us now assume
that information on a plurality of character...

...in the X-direction, when a projection YSD in the Y-direction is taken
(see Fig. 8B), **row** region LE1 may be extracted (see Fig. 8C). **Row**
region LE1 may be extracted without using such information of the
plurality of character regions CE1. If...

...in the X-direction in Fig. 7D, information on both ends is cut out, at
least one **row** region LE1 is extracted.
    Each of the extracted row regions LE1 is defined by rectangular region
data...

28/5,K/2   (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00996862
Start code detecting apparatus for video data stream
Vorrichtung zur Startkodedetektierung fur Videodatenstrom
Appareil de detection de code de depart pour un flux de donnees video
PATENT ASSIGNEE:
  Discovision Associates, (260275), 2355 Main Street, Suite 200, Irvine, CA
    92614, (US), (Applicant designated States: all)
INVENTOR:
  Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA,
    (GB)
  Sotheran, Martin William, The Ridings, WickLane Stinchcombe, Dursley,
    Gloucestershire G11 6BD, (GB)
  Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE,
    (GB)
  Finch, Helen Rosemary, Tyley, Coombe, Wotton-under-edge, Gloucester GL12
    7ND, (GB)
  Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)
LEGAL REPRESENTATIVE:
  Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,
    rue Louis Chirpaz, 69131 Ecully Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 901287 A2 990310 (Basic)
                              EP 901287 A3 990922
APPLICATION (CC, No, Date):   EP 98202166 950228;
PRIORITY (CC, No, Date): GB 9405914 940324
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL
RELATED PARENT NUMBER(S) - PN (AN):
  EP 674443 (EP 95301301)

INTERNATIONAL PATENT CLASS: H04N-007/24; **G06F-013/00** ; **G06F-009/38**

ABSTRACT EP 901287 A2
    A system having a plurality of processing stages, comprising a
universal adaptation unit in the form of an interactive interfacing token
for control and/or data functions among said processing stages,

    wherein said token is a CODING(underscore)STANDARD token for
conditioning said system for processing in a selected one of a plurality
of picture compression/ decompression standards; one of said processing
stages being a Huffman decoder and parser; one of said control tokens
being a CODING(underscore)STANDARD control token; and upon receipt of
said CODING(underscore)STANDARD control token, said parser is reset to an
address location corresponding to the location of a program for handling
the picture standard identified by said CODING(underscore)STANDARD
control token.
ABSTRACT WORD COUNT: 112
NOTE:
    Figure number on first page: 61

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 990310 A2 Published application (A1with Search Report
                              ;A2without Search Report)
  Examination: 990310 A2 Date of filing of request for examination:
                              980629
  Search Report: 990922 A3 Separate publication of the search report
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A   (English) 9910   191
      SPEC A   (English) 9910   126718
Total word count - document A   126909
Total word count - document B   0
Total word count - documents A + B 126909

...INTERNATIONAL PATENT CLASS: **G06F-013/00** ...

... **G06F-009/38**

...SPECIFICATION systems which do not use control tokens.
    The control tokens are generated by circuitry within the decoder
processor and emulate the operation of a number of different type
standard-dependent signals passing into the serial...480, 30 Hz, 4:2:0
. Flexible chroma sampling formats
. Full JPEG baseline decoding
. Glue-less page **mode** DRAM interface
. 208 pin PQFP package
. Independent coded data and decoder clocks
. Re-orders MPEG picture sequence...word of Token supplied
(coded(underscore)extn goes low).
    3)First byte of data supplied in byte **mode** . A new DATA Token is
automatically created on-chip.

A.10.2 Supplying data via the MPI...non-data Tokens.

A.12.10 Counter flushed too early
    If a FLUSH token arrives at the **bit** counter before the bit count
target is attained, an event is generated which can cause an interrupt...

...between the output of the Huffman decoder and the input of the spatial
video decoding circuits (inverse **modeler** , quantizer and DCT). This

second logical buffer allows processing time to include a spread so as to
...

28/5,K/3   (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00996861
Multistandard decoder for Huffman codes
Mehrnormendekodierer fur Huffmancodes
Decodeur multistandard de codes de Huffman
PATENT ASSIGNEE:
  Discovision Associates, (260275), 2355 Main Street, Suite 200, Irvine, CA
    92614, (US), (applicant designated states:
    AT;BE;CH;DE;FR;GB;IE;IT;LI;NL)
INVENTOR:
  Wise, Adrian Philip, 10 Westbourne Cottages, Frenchhay, Bristol BS16 1NA,
    (GB)
  Sotheran, Martin William, The Riddin gs, Wick Lane Stinchcombe, Dursley,
    GLoucestershire GL11 6BD, (GB)
  Robbins, William Philip, 19 Sprin ghill, Cam, Gloucestershire GL11 5PE,
    (GB)
  Finch, Helen Rosemary, Tyley,Coombe, Wotton-Under-Edge, Gloucester GL12
    7ND, (GB)
  Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)
LEGAL REPRESENTATIVE:
  Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,
    rue Louis Chirpaz, 69131 Ecully Cedex, (FR)
PATENT (CC, No, Kind, Date):   EP 901286 A1 990310 (Basic)
APPLICATION (CC, No, Date):   EP 98202135 950228;
PRIORITY (CC, No, Date): GB 9405914 940324
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL
RELATED PARENT NUMBER(S) - PN (AN):
  EP 674443 (EP 953013018)
INTERNATIONAL PATENT CLASS: H04N-007/24; **G06F-013/00** ; **G06F-009/38**

ABSTRACT EP 901286 A1
  A Huffman decoder for decoding data words encoded according to the
  Huffman coding provisions of either H.261 or MPEG standards, the data
  words including an identifier that identifies the Huffman code standard
  under which the data words were coded, comprising :
    means for receiving the Huffman coded data words, including means for
  reading the identifier to determine which standard governed the Huffman
  coding of the received data words, and means for converting the data
  words to JPEG Huffman coded data words, if necessary, in response to
  reading the identifier that identifies the Huffman coded data words as
  H.261 or MPEG Huffman coded ;

    means, operably connected to the Huffman coded data words receiving
  means, for generating an index number associated with each JPEG Huffman
  coded data word receiving an index number from the index number
  generating means, and including an output that is a decoded data word
  corresponding to the index number.
ABSTRACT WORD COUNT: 155

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 990310 A1 Published application (A1with Search Report
                              ;A2without Search Report)
  Examination: 990310 A1 Date of filing of request for examination:
                              980626

4

Examination: 990901 A1 Date of dispatch of the first examination
                              report: 19990713
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
     CLAIMS A   (English) 9910   390
     SPEC A   (English) 9910   126718
Total word count - document A   127108
Total word count - document B   0
Total word count - documents A + B   127108

...INTERNATIONAL PATENT CLASS: **G06F-013/00** ...
... **G06F-009/38**

...SPECIFICATION systems which do not use control tokens.
    The control tokens are generated by circuitry within the decoder
processor and emulate the operation of a number of different type
standard-dependent signals passing into the serial...480, 30 Hz, 4:2:0
. Flexible chroma sampling formats
. Full JPEG baseline decoding
. Glue-less page **mode** DRAM interface
. 208 pin PQFP package
. Independent coded data and decoder clocks
. Re-orders MPEG picture sequence...word of Token supplied
(coded(underscore)extn goes low).
    3)First byte of data supplied in byte **mode** . A new DATA Token is
automatically created on-chip.

A.10.2 Supplying data via the MPI...non-data Tokens.

A.12.10 Counter flushed too early
    If a FLUSH token arrives at the **bit** counter before the bit count
target is attained, an event is generated which can cause an interrupt...
...between the output of the Huffman decoder and the input of the spatial
video decoding circuits (inverse **modeler** , quantizer and DCT). This
second logical buffer allows processing time to include a spread so as to
...

 28/5,K/4   (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00975324
Pipeline decoding system
Pipeline-System zur Dekodierung
Systeme pipeline de decodage
PATENT ASSIGNEE:
  Discovision Associates, (260275), 2355 Main Street, Suite 200, Irvine, CA
    92614, (US), (Proprietor designated states: all)
INVENTOR:
  Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA,
    (GB)
  Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley,
    Gloucestershire GL11 6BD, (GB)
  Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE,
    (GB)
  Finch, Helen Rosemary, Tyley, Coombe, Wotton-Under-Edge, Gloucesterhire
    GL12 7ND, (GB)
  Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)
LEGAL REPRESENTATIVE:

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,
    rue Louis Chirpaz, 69131 Ecully Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 884910 A1 981216 (Basic)
                              EP 884910 B1 010509
APPLICATION (CC, No, Date):   EP 98202132 950228;
PRIORITY (CC, No, Date): GB 9405914 940324
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL
RELATED PARENT NUMBER(S) - PN (AN):
  EP 674443 (EP 95301301)
INTERNATIONAL PATENT CLASS: H04N-007/24; **G06F-013/00 ; G06F-009/38**
CITED PATENTS (EP B): EP 572766 A; EP 576749 A; WO 94/25935 A
CITED REFERENCES (EP B):
  MAYER A C: "THE ARCHITECTURE OF A SINGLE-CHIP PROCESSOR ARRAY FOR
    VIDEOCOMPRESSION" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON
    CONSUMER ELECTRONICS, ROSEMONT, JUNE 8 - 10, 1993, no. CONF. 12, 8 June
    1993, page 294/295 XP000427624 INSTITUTE OF ELECTRICAL AND ELECTRONICS
    ENGINEERS
  KAORU UCHIDA ET AL: "A PIPELINED DATAFLOW DATAFLOW PROCESSOR ARCHITECTURE
    BASED ON A VARIABLE LENGTH TOKEN CONCEPT" ARCHITECTURE, UNIVERSITY
    PARK, AUG. 15 - 19, 1988, vol. 1, no. CONF. 17, 15 August 1988, pages
    209-216, XP000079309
  YONG M CHONG: "A DATA-FLOW ARCHITECTURE FOR DIGITAL IMAGE PROCESSING"
    WESCON CONFERENCE RECORD,1 January 1984, pages 4/6 1-4/6 10,
    XP000565437
  KOMORI S ET AL: "AN ELASTIC PIPELINE MECHANISM BY SELF-TIMED CIRCUITS"
    IEEE JOURNAL OF SOLID-STATE CIRCUITS, vol. 23, no. 1, February 1988,
    pages 111-117, XP000051576;

ABSTRACT EP 884910 A1
    A pipeline system having an inverse modeller stage and an inverse
    discrete cosine transform stage, comprising a processing stage,
    positioned between said inverse modeller stage and said inverse discrete
    cosine transform stage, responsive to tokens for processing data, wherein
    said tokens each comprise a plurality of data words, each said word
    including an extension indicator which indicates a presence or an absence
    of additional words in said token, a length of said token being
    determined by said extension indicators, whereby the length of said token
    can be unlimited;

    wherein said tokens are communicated from said inverse modeller stage to
    said processing stage.
ABSTRACT WORD COUNT: 104
NOTE:
  Figure number on first page: 76

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Change: 000607 A1 International Patent Classification changed:
                              20000419
  Application: 981216 A1 Published application (A1with Search Report
                              ;A2without Search Report)
  Oppn None: 020502 B1 No opposition filed: 20020212
  Lapse: 020403 B1 Date of lapse of European Patent in a
                              contracting state (Country, date): AT
                              20010509, BE 20010509,
  Grant: 010509 B1 Granted patent
  Change: 000607 A1 Title of invention (French) changed: 20000419
  Change: 000607 A1 Title of invention (English) changed: 20000419
  Change: 000607 A1 Title of invention (German) changed: 20000419
  Change: 000712 A1 International Patent Classification changed:
                              20000524
  Change: 000712 A1 Title of invention (German) changed: 20000524

Change:	000712	A1	Title of invention (English) changed: 20000524
Change:	000712	A1	Title of invention (French) changed: 20000524
Lapse:	020320	B1	Date of lapse of European Patent in a contracting state (Country, date): BE 20010509,
Lapse:	020410	B1	Date of lapse of European Patent in a contracting state (Country, date): AT 20010509, BE 20010509, CH 20010509, LI 20010509,
Examination:	981216	A1	Date of filing of request for examination: 980626
Examination:	990901	A1	Date of dispatch of the first examination report: 19990713

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199851	498
CLAIMS B	(English)	200119	330
CLAIMS B	(German)	200119	308
CLAIMS B	(French)	200119	382
SPEC A	(English)	199851	126705
SPEC B	(English)	200119	122739
Total word count - document A		127222	
Total word count - document B		123759	
Total word count - documents A + B		250981	

...INTERNATIONAL PATENT CLASS: **G06F-013/00** ...

... **G06F-009/38**
...SPECIFICATION in the bit(underscore)count(underscore)target register. A
target met event is then generated and the **bit** counter resets to zero
and waits for the next FLUSH Token.
    The bit counter will also stop...be generated for any subsequent bytes
of extra(underscore)information(underscore)picture. If there is only a
single byte of extra(underscore)information(underscore)picture, no
Parser event will occur.

A.14.8 Changes at...

...The MPEG sequence header describes the following characteristic of the
video about to be decoded:
(horizontal and **vertical** size
(pixel aspect ratio
(picture rate
(coded data rate
(...

28/5,K/5   (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2002 European Patent Office. All rts. reserv.

00893346
Semiconductor memory device
Halbleiterspeicheranordnung
Dispositif de memoire a semi-conducteurs
PATENT ASSIGNEE:
  MITSUBISHI DENKI KABUSHIKI KAISHA, (208581), 2-3, Marunouchi 2-chome
    Chiyoda-ku, Tokyo, (JP), (Proprietor designated states: all)
  MITSUBISHI ELECTRIC ENGINEERING CO., LTD., (1515570), 6-2 Ohte-machi
    2-chome, Chiyoda-ku, Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:
  Dosaka, Katsumi, c/o Mitsubishi Denki K.K. LSI, Kenkyusho, 1 Mizuhara
    4-chome, Itami-shi, Hyogo-ken, (JP)
  Kumanoya, Masaki, c/o Mitsubishi Denki K.K. LSI, Kenkyusho, 1 Mizuhara
    4-chome, Itami-shi, Hyogo-ken, (JP)
  Yamazaki, Akira, c/o Mitsubishi Denki K.K. LSI, Kenkyusho, 1 Mizuhara
    4-chome, Itami-shi, Hyogo-ken, (JP)
  Iwamoto, Hisashi, c/o Mitsubishi Denki K.K. LSI, Kenkyusho, 1 Mizuhara
    4-chome, Itami-shi, Hyogo-ken, (JP)
  Konishi, Yasuhiro, c/o Mitsubishi Denki K.K. LSI, Kenkyusho, 1 Mizuhara
    4-chome, Itami-shi, Hyogo-ken, (JP)
  Hayano, Kouji, c/o Mitsubishi Denki K.K., Kitaitami Seisakusho 1,
    Mizuhara 4-chome, Itami-shi, Hyogo-ken, (JP)
  Abe, Hideaki, c/o Mitsubishi Denki K.K., Kitaitami Seisakusho 1, Mizuhara
    4-chome, Itami-shi, Hyogo-ken, (JP)
  Himukashi, Katsumitsu, Mitsubishi El. Eng. Co. Ltd, LSI Engineering
    Office, 61-5 Higashino 4-chome, Itami-shi, Hyogo-ken, (JP)
  Ishizuka, Yasuhiro, Mitsubishi El. Eng. Co. Ltd, LSI Engineering Office,
    61-5 Higashino 4-chome, Itami-shi, Hyogo-ken, (JP)
  Saiki, Tsukasa, Mitsubishi El. Eng. Co. Ltd, LSI Engineering Office, 61-5
    Higashino 4-chome, Itami-shi, Hyogo-ken, (JP)
LEGAL REPRESENTATIVE:
  Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. High Holborn
    2-5 Warwick Court, London WC1R 5DJ, (GB)
PATENT (CC, No, Kind, Date): EP 817198 A1 980107 (Basic)
                              EP 817198 B1 000315
APPLICATION (CC, No, Date):   EP 97201598 920416;
PRIORITY (CC, No, Date): JP 9185625 910418; JP 91212140 910823; JP 91242286
    910924; JP 9217809 920203
DESIGNATED STATES: DE; FR; GB; IT
RELATED PARENT NUMBER(S) - PN (AN):
  EP 509811 (EP 92303424)
INTERNATIONAL PATENT CLASS: G11C-011/00; G11C-007/00; G11C-008/00;
  G11C-008/04; G11C-011/406; G11C-011/419; G11C-005/06; **G06F-012/08**
CITED PATENTS (EP B): EP 115187 A; EP 136819 A; EP 156316 A; EP 277763 A;
  EP 326953 A; EP 344752 A; EP 420339 A; DE 2329527 A; FR 2606199 A; US
  4660180 A; US 4802129 A; US 4809156 A; US 4912630 A; US 4943960 A; US
  4953131 A; US 4970418 A; US 4977538 A; US 4984206 A
CITED REFERENCES (EP B):
  PATENT ABSTRACTS OF JAPAN vol. 11, no. 223, 21 July 1987 & JP 62 038590 A
    (FUJITSU)
  PATENT ABSTRACTS OF JAPAN vol. 13, no. 198, 15 March 1989 & JP 63 285795
    A (AGENCY OF IND SCIENCE & TECHOLOGY)
  PATENT ABSTRACTS OF JAPAN vol. 14, no. 289, 21 June 1990 & JP 02 087392 A
    (HITACHI)
  ARIMOTO ET AL: "a circuit design of intelligent cache dram with automatic
    write back capability." IEEE JOURNAL OF SOLID STATE CIRCUITS, vol. 26,
    no. 4, April 1991, NEW YORK US, pages 560-565, XP002043297
  AMITAI ET AL: "BURST MODE MEMORIES IMPROVE CACHE DESIGN" IRE WESCON
    CONVENTION RECORD, October 1990, pages 29-33, XP002043298
  PATENT ABSTRACTS OF JAPAN vol. 13, no. 375, 21 August 1989 & JP 01 128294
    A (SHARP)
  PATENT ABSTRACTS OF JAPAN vol. 11, no. 26, 24 January 1987 & JP 61 196345
    A (NEC CORP)
  PATENT ABSTRACTS OF JAPAN vol. 11, no. 58, 21 February 1987 & JP 61
    222091 A (FUJITSU)
  YAMADA ET AL: "A 64 KBIT MOS DYNAMIC RAM WITH AUTO/SELF REFRESH
    FUNCTIONS" ELECTRONICS AND COMMUNICATIONS INJAPAN, vol. 66, no. 1,
    January 1983, SILVER SPRING,MARYLAND,USA, pages 103-110, XP002043299
  KUNG ET AL: "AN 8KX8 DYNAMIC RAM WITH SELF REFRESH" IEEE JOURNAL OF SOLID
    STATE CIRCUITS, vol. 17, no. 5, October 1982, NEW YORK,USA, pages

863-871, XP002043300
HAIDAKA ET AL : "THE CACHE DRAM ARCHITECTURE: A DRAM WITH AN ON-CHIP
CACHE MEMORY" IEEE MICRO, vol. 10, no. 2, April 1991, NEW YORK,USA,
pages 14-25, XP002043301;

ABSTRACT EP 817198 A1
A semiconductor memory device includes a DRAM (100), an SRAM (200) and
a bi-direction transfer gate circuit (210) provided between SRAM (200)
and DRAM (100). SRAM array (201; 560) includes a plurality of sets of
word lines. Each set is provided in each row of SRAM array and each word
line in each set is connected to a different group of memory cells of an
associated row. An address signal for the SRAM and an address signal for
the DRAM are separately applied to an address buffer (255). The
semiconductor memory device further includes an additional function
control circuit (229) for realizing a burst mode and a sleep mode. A data
transfer path from DRAM to the SRAM and a data transfer path from the
SRAM to the DRAM are separately provided in the bi-directional transfer
gate circuit. Data writing paths (GIL) and (LIL) and data reading paths
(LOL) and (GOL) are separately provided in the DRAM array. By the above
described structure, operation of the buffer circuit is stopped in the
sleep mode, reducing power consumption. Since data writing path and data
reading path are separately provided in the DRAM array, addresses to the
DRAM array can be applied in non-multiplexed manner, so that data can be
transferred at high speed from the DRAM array to the SRAM array, enabling
high speed operation even at a cache miss.
ABSTRACT WORD COUNT: 230
NOTE:
Figure number on first page: 9

LEGAL STATUS (Type, Pub Date, Kind, Text):
Oppn None: 010228 B1 No opposition filed: 20001216
Grant: 20000315 B1 Granted patent
Application: 980107 A1 Published application (A1with Search Report
                         ;A2without Search Report)
Examination: 980304 A1 Date of filing of request for examination:
                         971224
Examination: 980520 A1 Date of despatch of first examination report:
                         980401
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
     CLAIMS A   (English) 199802   5803
     CLAIMS B   (English) 200011   2935
     CLAIMS B   (German)   200011   2533
     CLAIMS B   (French)   200011   3808
     SPEC A   (English) 199802   90313
     SPEC B   (English) 200011   73947
Total word count - document A   96130
Total word count - document B   83223
Total word count - documents A + B   179353

...INTERNATIONAL PATENT CLASS: **G06F-012/08**

...SPECIFICATION of signal waveforms showing data transfer operation from
the DRAM array to the SRAM array when the **bi - directional** data
transfer circuit shown in Fig. 44 is employed.
Figs. 48A through 48F show, as an example...bus 251, and for detecting
and amplifying information of the selected SRAM cells in data reading. A
bi - directional transfer gate circuit 210 is provided between DRAM 100
and SRAM 200. Referring to Fig. 32, the...

● ●

28/5,K/6   (Item 6 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00711606
Start code detector for image sequences
Detektor fur den Startcode von Bildsequenzen
Detecteur de code de depart pour sequences d'images
PATENT ASSIGNEE:
  DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA
    92714, (US), (Proprietor designated states: all)
INVENTOR:
  Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA,
    (GB)
  Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley,
    Gloucestershire GL11 6BD, (GB)
  Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE,
    (GB)
  Finch, Helen Rosemary, Tyley, Coombe, Wotton-Under-Edge, Gloucester. GL12
    7ND, (GB)
  Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)
LEGAL REPRESENTATIVE:
  Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,
    rue Louis Chirpaz, 69131 Ecully Cedex, (FR)
PATENT (CC, No, Kind, Date):   EP 674443   A2   950927 (Basic)
                               EP 674443   A3   951213
                               EP 674443   A3   981223
                               EP 674443   B1   010509
APPLICATION (CC, No, Date):   EP 95301301 950228;
PRIORITY (CC, No, Date): GB 9405914 940324
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL
RELATED DIVISIONAL NUMBER(S) - PN (AN):
  EP 891089   (EP 98202149)
    (EP 98202154)
  EP 884910   (EP 98202132)
  EP 891088   (EP 98202133)
  EP 897244   (EP 98202134)
  EP 901286   (EP 98202135)
  EP 901287   (EP 98202166)
  EP 896473   (EP 98202170)
  EP 896474   (EP 98202171)
  EP 896476   (EP 98202174)
  EP 896475   (EP 98202172)
INTERNATIONAL PATENT CLASS: H04N-007/24; **G06F-013/00** ; **G06F-009/38**
CITED PATENTS (EP B): EP 288219 A; EP 460751 A; EP 506294 A; EP 551672 A;
  EP 572263 A; EP 572766 A; EP 576749 A; EP 577329 A; EP 602621 A; WO
  94/25935 A; GB 2269070 A; US 4622585 A; US 4823201 A; US 5173695 A; US
  5253053 A
CITED REFERENCES (EP B):
  KUN-MIN YANG ET AL: "VLSI ARCHITECTURE DESIGN OF A VERSATILE VARIABLE
    LENGTH DECODING CHIP FOR REAL-TIME VIDEO CODECS" PROCEEDINGS OF THE
    REGION 10 CONFERENCE ON COMPUTER AND COMMUNICATI SYSTEMS (TENCON), HONG
    KONG, 24 - 27 SEPT., 1990, vol. 2, 24 September 1990, pages 551-554,
    XP000235934 INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
  KOMORI S ET AL: "AN ELASTIC PIPELINE MECHANISM BY SELF-TIMED CIRCUITS"
    IEEE JOURNAL OF SOLID-STATE CIRCUITS, vol. 23, no. 1, February 1988,
    pages 111-117, XP000051576
  KAORU UCHIDA ET AL: "A PIPELINED DATAFLOW DATAFLOW PROCESSOR ARCHITECTURE
    BASED ON A VARIABLE LENGTH TOKEN CONCEPT" ARCHITECTURE, UNIVERSITY
    PARK, AUG. 15 - 19, 1988, vol. 1, 15 August 1988, pages 209-216,

XP000079309 BRIGGS F A
TOKUMICHI MURAKAMI ET AL: "A DSP ARCHITECTURAL DESIGN FOR LOW BIT-RATE
    MOTION VIDEO CODEC" IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS, vol. 36,
    no. 10, 1 October 1989, pages 1267-1274, XP000085313
ELLIOTT J A ET AL: "REAL-TIME SIMULATION OF VIDEOPHONE IMAGE CODING
    ALGORITHMS ON RECONFIGURABLE MULTICOMPUTERS" IEE PROCEEDINGS E.
    COMPUTERS & DIGITAL TECHNIQUES, vol. 139, no. 3 PART E, 1 May 1992,
    pages 269-279, XP000306411
MAYER A C: "THE ARCHITECTURE OF A SINGLE-CHIP PROCESSOR ARRAY FOR
    VIDEOCOMPRESSION" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON
    CONSUMER ELECTRONICS, ROSEMONT, JUNE 8 - 10, 1993, no. CONF. 12, 8 June
    1993, page 294/295 XP000427624 INSTITUTE OF ELECTRICAL AND ELECTRONICS
    ENGINEERS
YONG M CHONG: "A DATA-FLOW ARCHITECTURE FOR DIGITAL IMAGE PROCESSING"
    WESCON CONFERENCE RECORD, 1 January 1984, pages 4/6 1-4/6 10,
    XP000565437;

ABSTRACT EP 674443 A2
    A multi-standard video decompression apparatus has a plurality of
stages interconnected by a two-wire interface arranged as a pipeline
processing machine. Control tokens and DATA Tokens pass over the single
two-wire interface for carrying both control and data in token format. A
token decode circuit is positioned in certain of the stages for
recognizing certain of the tokens as control tokens pertinent to that
stage and for passing unrecognized control tokens along the pipeline.
Reconfiguration processing circuits are positioned in selected stages and
are responsive to a recognized control token for reconfiguring such stage
to handle an identified DATA Token.
ABSTRACT WORD COUNT: 102
NOTE:
    Figure number on first page: 61

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Grant: 010509 B1 Granted patent
  Application: 950927 A2 Published application (A1with Search Report
                               ;A2without Search Report)
  Oppn None: 020502 B1 No opposition filed: 20020212
  Lapse: 020403 B1 Date of lapse of European Patent in a
                               contracting state (Country, date): AT
                               20010509, BE 20010509,
  Lapse: 020320 B1 Date of lapse of European Patent in a
                               contracting state (Country, date): BE
                               20010509,
  Lapse: 020410 B1 Date of lapse of European Patent in a
                               contracting state (Country, date): AT
                               20010509, BE 20010509, CH 20010509, LI
                               20010509,
  Search Report: 951213 A3 Separate publication of the European or
                               International search report
 *Search Report: 960110 A2 Separate publication of European or Intl search
                               report (change)
  Change: 971022 A2 Representative (change)
  Change: 980304 A2 Obligatory supplementary classification
                               (change)
  Examination: 981104 A2 Date of filing of request for examination:
                               980908
  Search Report: 981223 A3 Separate publication of the European or
                               International search report
  Examination: 990324 A2 Date of despatch of first examination report:
                               990208
LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	2897
CLAIMS B	(English)	200119	647
CLAIMS B	(German)	200119	609
CLAIMS B	(French)	200119	752
SPEC A	(English)	EPAB95	128616
SPEC B	(English)	200119	122384
Total word count - document A			131543
Total word count - document B			124392
Total word count - documents A + B			255935

...INTERNATIONAL PATENT CLASS: **G06F-013/00** ...
... **G06F-009/38**

...SPECIFICATION with the data. In this way, the identifier field acts as
an instruction for the data-flow **processor** . The system directs each
token to a specific data-flow processor using a module number (MN). If...

...SPECIFICATION halves to illustrate that each stage in this embodiment of
the pipeline includes primary and secondary data **storage** elements. In
Fig. 2, the primary data storage is shown as the right half of each stage
...2:0
(Flexible chroma sampling formats
(Can re-order the MPEG picture sequence
(Glue-less DRAM interface
(**Single** +5V supply
(208 pin PQFP package
(Max. power dissipation 2.5W
(Uses standard page mode DRAM
The...

 28/5,K/7 (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00711605
Reconfigurable data processing stage
Rekonfigurierbare Datenverarbeitungsstufe
Etage d'operation de donnees reconfigurable
PATENT ASSIGNEE:
  DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA
    92714, (US), (Proprietor designated states: all)
INVENTOR:
  Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol, BS16 1NA,
    (GB)
  Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley,
    Gloucestershire, GL11 6BD, (GB)
  Robbins, William Philip, 19 Springhill, Cam, Gloucestershire, GL11 5PE,
    (GB)
LEGAL REPRESENTATIVE:
  Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,
    rue Louis Chirpaz, 69131 Ecully Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 674446 A2 950927 (Basic)
                              EP 674446 A3 960814
                              EP 674446 B1 010801
APPLICATION (CC, No, Date):   EP 95301300 950228;
PRIORITY (CC, No, Date): GB 9405914 940324
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL
INTERNATIONAL PATENT CLASS: H04N-007/24; **G06F-013/00** ; **G06F-009/38**

CITED PATENTS (EP B): EP 572766 A; EP 576749 A; WO 94/25935 A
CITED REFERENCES (EP B):
    ARCHITECTURE, UNIVERSITY PARK, AUG. 15 - 19, 1988, vol. 1, 15 August
        1988, BRIGGS F A, pages 209-216, XP000079309 KAORU UCHIDA ET AL: "A
        PIPELINED DATAFLOW DATAFLOW PROCESSOR ARCHITECTURE BASED ON A VARIABLE
        LENGTH TOKEN CONCEPT"
    IEEE JOURNAL OF SOLID-STATE CIRCUITS, vol. 23, no. 1, pages 111-117,
        XP000051576 KOMORI S ET AL: "AN ELASTIC PIPELINE MECHANISM BY
        SELF-TIMED CIRCUITS"
    IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS, vol. 36, no. 10, 1 October
        1989, pages 1267-1274, XP000085313 TOKUMICHI MURAKAMI ET AL: "A DSP
        ARCHITECTURAL DESIGN FOR LOW BIT-RATE MOTION VIDEO CODEC"
    IEE PROCEEDINGS E. COMPUTERS & DIGITAL TECHNIQUES, vol. 139, no. 3 PART
        E, 1 May 1992, pages 269-279, XP000306411 ELLIOTT J A ET AL: "REAL-TIME
        SIMULATION OF VIDEOPHONE IMAGE CODING ALGORITHMS ON RECONFIGURABLE
        MULTICOMPUTERS"
    PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON CONSUMER ELECTRONICS,
        ROSEMONT, JUNE 8 - 10, 1993, no. CONF. 12, 8 June 1993, INSTITUTE OF
        ELECTRICAL AND ELECTRONICS ENGINEERS, page 294/295 XP000427624 MAYER A
        C: "THE ARCHITECTURE OF A SINGLE-CHIP PROCESSOR ARRAY FOR
        VIDEOCOMPRESSION"
    4TH INTERNATIONAL CONFERENCE ON SIGNAL PROCESSING APPLICATIONS &
        TECHNOLOGY, vol. 2, 28 September 1993 - 1 October 1993, SANTA CLARA,
        CALIFORNIA, US, pages 1031-1038, XP002014370 TOM KOPET: "Programmable
        architectures for real-time video compression"
    WESCON '84 CONFERENCE RECORD, ANAHEIM, CA, USA, 30 October 1984 - 1
        November 1984, pages 4.6.1-4.6.10, XP002014371 Y.M.CHONG: "A Data-Flow
        Architecure for Digital Image Processing";

ABSTRACT EP 674446 A3
    A multi-standard video decompression apparatus has a plurality of
stages interconnected by a two-wire interface arranged as a pipeline
processing machine. Control tokens and DATA Tokens pass over the single
two-wire interface for carrying both control and data in token format. A
token decode circuit is positioned in certain of the stages for
recognizing certain of the tokens as control tokens pertinent to that
stage and for passing unrecognized control tokens along the pipeline.
Reconfiguration processing circuits are positioned in selected stages
and are responsive to a recognized control token for reconfiguring such
stage to handle an identified DATA Token. A wide variety of unique
supporting subsystem circuitry and processing techniques are disclosed
for implementing the system. (see image in original document)
ABSTRACT WORD COUNT: 144
NOTE:
    Figure number on first page: 10

LEGAL STATUS (Type, Pub Date, Kind, Text):
    Grant: 010801 B1 Granted patent
    Application: 950927 A2 Published application (A1with Search Report
                                ;A2without Search Report)
    Oppn None: 020724 B1 No opposition filed: 20020503
    Lapse: 020410 B1 Date of lapse of European Patent in a
                                contracting state (Country, date): AT
                                20010801,
    Lapse: 020717 B1 Date of lapse of European Patent in a
                                contracting state (Country, date): AT
                                20010801, BE 20010801,
    Change: 960501 A2 International patent classification (change)
    Change: 960501 A2 Obligatory supplementary classification
                                (change)
    Search Report: 960814 A3 Separate publication of the European or

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International search report
Examination: 970409 A2 Date of filing of request for examination:
                                970212
Change: 971105 A2 Representative (change)
Examination: 990901 A2 Date of dispatch of the first examination
                                report: 19990713
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
      CLAIMS A   (English)   EPAB95   2475
      CLAIMS B   (English)   200131   1079
      CLAIMS B   (German)   200131   1072
      CLAIMS B   (French)   200131   1186
      SPEC A   (English)   EPAB95   125236
      SPEC B   (English)   200131   121335
Total word count - document A   127738
Total word count - document B   124672
Total word count - documents A + B   252410

...INTERNATIONAL PATENT CLASS: G06F-013/00 ...

... G06F-009/38

...SPECIFICATION accept new data. Since Stage F is not able to transfer the
  data D1 in its primary **storage** elements downstream (the ACCEPT signal
  into Stage F is LOW) in Cycle 3, Stage E must, therefore...

28/5,K/8   (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00664899
**Dynamically reconfigurable interprocessor communication network for SIMD
  multi-processors and apparatus implementing same.**
**Dynamisches rekonfigurbares Prozessorkommunikationsnetzwerk fur
  SIMD-Multiprozessoren und Vorrichtung zu seinem Betrieb.**
**Reseau de communication entre processeurs a reconfiguration dynamique pour
  des multiprocesseurs de type SIMD et appareil pour sa mise en oeuvre.**
PATENT ASSIGNEE:
  Hughes Aircraft Company, (214913), 7200 Hughes Terrace P.O. Box 45066,
    Los Angeles, California 90045-0066, (US), (applicant designated states:
    BE;DE;ES;FR;GB;IT;NL;SE)
INVENTOR:
  Shams, Soheil, 1706 Clark Lane, Nr. B, Redondo Beach, CA 90278, (US)
  Shu, David B., 8748 Hanna Avenue, Canoga Park, CA 91304, (US)
LEGAL REPRESENTATIVE:
  Witte, Alexander, Dr.-Ing. et al (46523), Witte, Weller, Gahlert & Otten
    Patentanwalte Rotebuhlstrasse 121, D-70178 Stuttgart, (DE)
PATENT (CC, No, Kind, Date): EP 638867   A2   950215 (Basic)
                              EP 638867   A3   951018
APPLICATION (CC, No, Date):   EP 94112550 940811;
PRIORITY (CC, No, Date): US 106465 930812
DESIGNATED STATES: BE; DE; ES; FR; GB; IT; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-015/16**

ABSTRACT EP 638867 A2
    In a SIMD architecture having a two-dimensional array of processing
  elements (10), where a controller broadcasts instructions to all
  processing elements (10) in the array, a dynamically reconfigurable
  switching means (14) useful to connect four of the processing elements

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(10) in the array into a group in accordance with either the broadcast instruction of the controller or a special communication instruction held in one processing element (10) of the group is provided. The switch (14) includes at least one data line (54) connected to each processing element (10) in the group. A multiplexer is connected to each data line (54) and to the controller and to a configuration register. It is adapted to load the special communication instruction from the one processing element (10) in the group into a configuration register and to operate in accord with either the broadcast instruction from the controller or the contents of the configuration register to select one of the four data lines (54) as a source of data and applying the data therefrom to a source output port. A demultiplexer is connected to each data line (54) and to the controller and to said configuration register, and to the source output port of the multiplexer means, and adapted to operate in accord with either the broadcast instruction from the controller or the contents of the configuration register to select one of the four data lines (54) as a source of data and applying the data therefrom to a selected data line (54). The switch (14) also acts to connect processing elements (10) that cross chip partitions forming the processor array. Up to four such switches (14) can be used to connect a group of four processing elements (10). (see image in original document)
ABSTRACT WORD COUNT: 292

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 950215 A2 Published application (A1with Search Report
                                ;A2without Search Report)
  Search Report: 951018 A3 Separate publication of the European or
                                International search report
  Withdrawal: 970122 A2 Date on which the European patent application
                                was deemed to be withdrawn: 960419
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	1236
SPEC A	(English)	EPABF2	4502
Total word count - document A			5738
Total word count - document B			0
Total word count - documents A + B			5738

INTERNATIONAL PATENT CLASS: **G06F-015/16**

...SPECIFICATION partitioned among multiple chips. An example partition of this switch is shown in Figure 8. A single **bidirectional** wire per bus bit is used to connect neighboring PEs in the west side to corresponding neighbors in the east side. In addition to r.c. coordinates within a chip, each **PE** is identified by its chip number. For example, **PE** C3...

...1.n represents **PE** located on **row** 1 and **column** n in chip 3. Similarly, **PE** C3...

...out and **PE** C3...

...in represent output channel and input channel respectively, of this **PE** . Since the switch shown is controlled by **PE** C3...

28/5,K/9   **(Item 9 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

00638303   .

A data processing system and method thereof.
Datenverarbeitungssystem- und methode.
Systeme et methode de traitement des donnees.
PATENT ASSIGNEE:
  MOTOROLA, INC., (205770), 1303 East Algonquin Road, Schaumburg, IL 60196,
    (US), (applicant designated states: DE;FR;GB;IT;NL)
INVENTOR:
  Gallup, Michael G., 1102 Radam Circle, Austin, Texas 78745, (US)
  Goke, L. Rodney, 5105 Dusty Trail Cove, Austin, Texas 78749, (US)
  Seaton, Robert W. Jr., 4836 Trail Crest Circle, Austin, Texas 78735, (US)
  Lawell, Terry G., 11522 Heathrow, Austin, Texas 78759, (US)
  Osborn, Stephen G., 3816 South Lamar No. 2412, Austin, Texas 78704, (US)
  Tomazin, Thomas J., 3703 Cookstown Drive, Austin, Texas 78759, (US)
LEGAL REPRESENTATIVE:
  Spaulding, Sarah Jane et al (73531), Motorola, European Intellectual
    Property Operations, Jays Close, Viables, Basingstoke, Hants. RG22 4PD,
    (GB)
PATENT (CC, No, Kind, Date): EP 619557 A2 941012 (Basic)
                                     EP 619557 A3 960612
APPLICATION (CC, No, Date):   EP 94104274 940318;
PRIORITY (CC, No, Date): US 40779 930331
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: **G06F-015/76 ; G06F-015/80 ; G06F-015/16 ;**
  G06F-015/78 ; G06F-009/38 ; G06F-007/544 ; G06F-009/32 ; G06F-009/315

ABSTRACT EP 619557 A2
    A data processing system (55) and method thereof includes one or more
data processors (10). Data processor (10) is capable of performing both
vector operations and scalar operations. Using a single microsequencer
(22), data processor (10) is capable of executing both vector
instructions and scalar instructions. Data processor (10) also has a
memory circuit (14) capable of storing both vector operands and scalar
operands. (see image in original document)
ABSTRACT WORD COUNT: 82

LEGAL STATUS (Type, Pub Date, Kind, Text):
Refusal: 000816 A2 Date European patent application was refused:
                            20000406
Application: 941012 A2 Published application (A1with Search Report
                            ;A2without Search Report)
Change: 951102 A2 Obligatory supplementary classification
                            (change)
Change: 960605 A2 Obligatory supplementary classification
                            (change)
Search Report: 960612 A3 Separate publication of the European or
                            International search report
Examination: 970212 A2 Date of filing of request for examination:
                            961212
Examination: 990127 A2 Date of despatch of first examination report:
                            981211
Change: 990922 A2 International Patent Classification changed:
                            19990802
Change: 990929 A2 Title of invention (German) changed: 19990809
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	5610
SPEC A	(English)	EPABF2	83930
Total word count - document A			89540
Total word count - document B			0

Total word count - documents A + B   89540

INTERNATIONAL PATENT CLASS: **G06F-015/76** ...
... **G06F-015/80** ...

... **G06F-015/16** ...

... **G06F-015/78** ...

... **G06F-009/38** ...

... **G06F-007/544** ...

... **G06F-009/32** ...

... **G06F-009/315**

...SPECIFICATION These signals transfer address or data information
  dependent on the Run/Stop mode of operation. In Run **mode** , this **bi** -
  directional port drives as an output in response to the write north
  microcode instruction (writen, vwriten), and serves...

...also bi-directional. If the OP signal indicates a Random Access
  transfer, and this device is selected (/ **ROW** and /COL are both
  asserted), this port will receive the LSB of the Random Access Address,
  and...

 28/5,K/10   (Item 10 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00480045
Built-in self-test technique for read-only memories
Technik zum eingebauten Selbsttest fur Nur-Lese-Speicher
Technique pour auto-test integre pour memoires mortes
PATENT ASSIGNEE:
  AT&T Corp., (589370), 32 Avenue of the Americas, New York, NY 10013-2412,
    (US), (applicant designated states: DE;FR;GB;IT;NL;SE)
INVENTOR:
  Zorian, Yervant, 31B Chicopee Drive, Princetown, New Jersey 08540, (US)
LEGAL REPRESENTATIVE:
  Buckley, Christopher Simon Thirsk et al (28912), Lucent Technologies, 5
    Mornington Road, Woodford Green, Essex IG8 0TU, (GB)
PATENT (CC, No, Kind, Date): EP 441518 A2 910814 (Basic)
                              EP 441518 A3 920701
                              EP 441518 B1 960904
APPLICATION (CC, No, Date):   EP 91300663 910129;
PRIORITY (CC, No, Date): US 475524 900206
DESIGNATED STATES: DE; FR; GB; IT; NL; SE
INTERNATIONAL PATENT CLASS: G11C-029/00; **G06F-011/26**
CITED REFERENCES (EP A):
  INTERNATIONAL TEST CONFERENCE, Sept 10-14, 1990 Washington, USA, Y.
    ZORIAN, A. IVANOV: "EEODM: An Effective BIST Scheme for ROMs", pages
    871-879
  THE TRANSACTIONS OF THE INSTITUTE OF ELECTRONICS, INFORMATION &
    COMMUNICATION ENGINEERS vol. E71, no. 10, October 1988, TOKYO, JAPAN
    pages 1013 - 1022; E. FUJIWARA: 'Referenceless Signature Testing using
    Bi-Directional LFSR'
  JOURNAL OF ELECTRONIC TESTING: THEORY AND APPLICATIONS vol. 1, February
    1990, pages 59 - 71; Y. ZORIAN, V. K. AGARWAL: 'Optimizing Error

Masking in BIST by Output Data Modification'
IEEE TRANSACTION ON COMPUTERS vol. 37, no. 9, September 1988, NEW YORK,
USA pages 1142 - 1145; W. H. MCANNEY, J. SAVIR: 'Built-In Checking of
the Correct Self-Test Signature';

ABSTRACT EP 441518 A2
Self-testing of a read only memory (10') containing an m x n+1 array of
single - bit storage cells (12') is accomplished by first loading the
bits of a preselected quotient string into the n+1 **column** of the
memory. Thereafter, a first polynomial division is performed on the
entire contents of the memory by sequentially shifting out of the bits in
the cells in each successive ROM **row** in a right-to-left direction into
a separate one of the n+1 inputs of a **bidirectional** multiple input
shift register (18'). A second polynomial division is then performed on
the m x n contents of the memory (10') by sequentially shifting the bits
out of each successive **row** into the shift register (18') in a
left-to-right direction. As each **row** of bits is shifted into the shift
register (18') during the second polynomial division, the register
generates a quotient bit which is exclusively OR'd with a separate one of
the quotient bits stored in the n+1(sup(th) **column** of the memory,
allowing for errors in the memory to be detected. At the conclusion of
the second polynomial division, there remains in the register a residue,
also indicative of the errors in the memory. (see image in original
document)
ABSTRACT WORD COUNT: 205

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 910814 A2 Published application (A1with Search Report
                              ;A2without Search Report)
Search Report: 920701 A3 Separate publication of the European or
                              International search report
Examination: 930203 A2 Date of filing of request for examination:
                              921207
Change: 940223 A2 Representative (change)
*Assignee: 940622 A2 Applicant (name, address) (change)
Examination: 941207 A2 Date of despatch of first examination report:
                              941024
Grant: 960904 B1 Granted patent
Oppn None: 970827 B1 No opposition filed
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1240
CLAIMS B	(English)	EPAB96	1259
CLAIMS B	(German)	EPAB96	1321
CLAIMS B	(French)	EPAB96	1442
SPEC A	(English)	EPABF1	5826
SPEC B	(English)	EPAB96	5904
Total word count - document A			7066
Total word count - document B			9926
Total word count - documents A + B			16992

...INTERNATIONAL PATENT CLASS: **G06F-011/26**

...ABSTRACT A2
Self-testing of a read only memory (10') containing an m x n+1 array of
single - bit storage cells (12') is accomplished by first loading the
bits of a preselected quotient string into the n+1 **column** of the
memory. Thereafter, a first polynomial division is performed on the
entire contents of the memory by sequentially shifting out of the bits in
the cells in each successive ROM **row** in a right-to-left direction into

a separate one of the n+1 inputs of a **bidirectional** multiple input
shift register (18'). A second polynomial division is then performed on
the m x n contents of the memory (10') by sequentially shifting the bits
out of each successive **row** into the shift register (18') in a
left-to-right direction. As each **row** of bits is shifted into the shift
register (18') during the second polynomial division, the register
generates...

...OR'd with a separate one of the quotient bits stored in the n+1(sup(th)
   column of the memory, allowing for errors in the memory to be detected.
At the conclusion of the...

...CLAIMS a read-only memory (ROM) (10) configured of an m row by n+1
      column array of **single – bit** storage cells (12), where m and n are
      integers, the n+1(sup(th) **column** containing a separate one of a
      set of predetermined bits, CHARACTERIZED BY the steps of:
         performing a...

...n+1 bits stored in the ROM by sequentially shifting the n+1 bits in each
      successive **row** in a first direction into a separate one of the
      inputs of an **bidirectional** multiple input shift register (18')
      (MISR) initialized with a predetermined seed;
         performing a second polynomial division on...

...rows of the ROM by sequentially shifting each of the first n bits in
      each successive ROM **row** in a second, **opposite direction** into a
      separate one of the inputs of the MISR such that at the completion of
      the...

...generating a quotient bit in the MISR as each of the first n bits in
      each successive **row** of the ROM are shifted in the second direction
      into a separate one of the inputs of...
...the MISR with a separate one of the predetermined bits stored in the
      n+1(sup(th) **column** of the ROM;
         detecting if a bit of a preselected state results when each
      separate bit in the n+1(sup(th) **column** of the ROM is logically
      combined with each separate quotient bit generated by the MISR, and
      if...

...for self-testing a ROM (10) containing an m row by n+1 column matrix
      array of **single bit** storage cells (12), the n+1(sup(th) **column**
      of the ROM containing a predetermined quotient string, the apparatus
      CHARACTERIZED BY:
         counter means (16') for addressing a sequential one of the
      storage locations in each **row** of the ROM to cause the bits stored
      in each **row** to be sequentially shifted out in a separate one of two
      opposite directions ; and
         bidirectional multiple input shift register (MISR) means (18')
      for: (a) performing a first polynomial division on the bits...

...m x n array of ROM storage cells as the bits in each of the first n
      columns of each **row** are shifted into the MISR mean and generating
      a residue following such division; (c) for producing a quotient bit
      as each of the n bits in each successive **row** are shifted into the
      MISR during the second polynomial division; (d) logically combining
      each successive quotient bit with a separate one of the bits stored
      in the n+1(sup(th) **column** of the ROM; and (e) detecting whether
      each bit resulting the logical combination of the produced quotient

...CLAIMS hereinafter referred to as ROM, being configured of an m row by
      n+1 column array of **single bit** storage cells (12), where m and n

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are integers, and having a bidrectional multiple input shift
   register (18), hereinafter referred to as **bidirectional** MISR,
   having n+1 inputs and being initialised with a predetermined seed,
   CHARACTERISED BY
   the n+1...

...Apparatus for self-testing a ROM (10) including an m row by n+1 column
   array of **single bit** storage cells (12), and a **bidirectional**
   multiple input shifter register (18), the apparatus CHARACTERISED
   BY:
   the n+1(sup(th) column of the...

28/5,K/11   **(Item 11 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS
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00390104
System and method for transforming and filtering a video image.
System und Verfahren zum Umformen und Filtern von Videobildern.
Systeme et methode pour transformer et filtrer une image video.
PATENT ASSIGNEE:
   AMPEX SYSTEMS CORPORATION, (1591830), 401 Broadway M-S 3-35, Redwood
      City, California 94063-3199, (US), (applicant designated states:
      DE;FR;GB)
INVENTOR:
   Beaulier, Daniel A., 324 Yale Road, Menlo Park, California, (US)
   Marsh, Theodore A., 5400 Fulton, San Fransisco, California, (US)
LEGAL REPRESENTATIVE:
   Horton, Andrew Robert Grant et al (32021), BOWLES HORTON Felden House
      Dower Mews High Street, Berkhamsted Hertfordshire HP4 2BL, (GB)
PATENT (CC, No, Kind, Date):   EP 378253 A2 900718 (Basic)
                               EP 378253 A3 900912
                               EP 378253 B1 940608
APPLICATION (CC, No, Date):   EP 90105501 840330;
PRIORITY (CC, No, Date): US 483424 830408
DESIGNATED STATES: DE; FR; GB
RELATED PARENT NUMBER(S) - PN (AN):
   EP 125003 (EP 843022088)
INTERNATIONAL PATENT CLASS: H03H-017/02; **G06F-015/68** ; **G06F-015/62**
CITED PATENTS (EP A): EP 52847 A; EP 52847 A; US 4328426 A
CITED REFERENCES (EP A):
   RCA REVIEW, vol. 42, no. 1, March 1981, pages 3-59; G.A. REITMEIER:
      "Spatial compression and expansion of digital television images"
   IDEM
   IEEE TRANSACTIONS ON COMPUTER, vol. C-31, no. 10, October 1982, pages
      934-942, IEEE, New York, US; M.R. WARPENBURG et al.: "SIMD image
      resampling"
   XEROX DISCLOSURE JOURNAL, vol. 5, no. 1, January/February 1980, pages
      115-116, Stamford, US; H. LIAO: "Table look-up realization of digital
      filtering";

ABSTRACT EP 378253 A2
   A video transformation and filtering system generates for each source
   image data point a plurality of target image addresses indicating a
   displacement between a point at which the source image data point maps
   into the target image and each data point of the target image which is
   affected by the source image data point. By providing either sequentially
   or in parallel a separate processing for each target image data point
   that is affected by a current source image data point values for all of
   the target image data points can be generated from a single pass of the

source image data points. By effectively providing the filtering in the
domain of the target image instead of the source image a single filter
function with a fixed number of points in the target image domain can be
used to attain low pass filtering of the resulting target image
irrespective of the degree of size compression of the video image.
ABSTRACT WORD COUNT: 162

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 900718 A2 Published application (A1with Search Report
                                ;A2without Search Report)
  Search Report: 900912 A3 Separate publication of the European or
                                International search report
  Change: 900912 A2 Obligatory supplementary classification
                                (change)
  Examination: 910227 A2 Date of filing of request for examination:
                                901222
  Examination: 931103 A2 Date of despatch of first examination report:
                                930921
  Change: 940112 A2 Representative (change)
 *Assignee: 940112 A2 Applicant (transfer of rights) (change): AMPEX
                                SYSTEMS CORPORATION (1591830) 401 Broadway M-S
                                3-35 Redwood City, California 94063-3199 (US)
                                (applicant designated states: DE;FR;GB)
  Change: 940112 A2 Designated Contracting States (change)
  Change: 940608 A2 Inventor (change)
  Grant: 940608 B1 Granted patent
  Oppn None: 950531 B1 No opposition filed
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
      CLAIMS B   (English)   EPBBF1   1134
      CLAIMS B   (German)   EPBBF1   917
      CLAIMS B   (French)   EPBBF1   1374
      SPEC B   (English)   EPBBF1   15943
Total word count - document A   0
Total word count - document B   19368
Total word count - documents A + B   19368

...INTERNATIONAL PATENT CLASS: **G06F-015/68** ...

... **G06F-015/62**

...SPECIFICATION 340 has one input responsive to the master reset signal,
   *RST and the second input responsive to **the** **Q** output of latch 337.
   Latch 337 is clocked by signal SYSK while latches 335, 336 are clocked
   ...of luminance and chrominance data. The components 400, 402 form output
   FIFO 17 which couples to frame **store** 18. The input of FIFO component
   400 is clocked in response to signal PIXLCK, pixel luminance clock...

 28/5,K/12   **(Item 12 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS
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00373227
Processor array.
Feldrechner.
Processeur en reseau.
PATENT ASSIGNEE:
  AMT(HOLDINGS) LIMITED, (1014030), 65 Suttons Park Avenue, Reading
    Berkshire RG6 1AZ, (GB), (applicant designated states:

AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
INVENTOR:
  Hunt, David John, 3 Moores Green Wokingham, Berkshire RG11 1QG, (GB)
  Thorpe, Roger Thomas, 24 Avellino, Irvine CA 92714, (US)
  Broughton, Andrew John, 23952 Dovekie Cr., Laguna Niguel CA 92677, (US)
LEGAL REPRESENTATIVE:
  Rackham, Stephen Neil et al (35061), GILL JENNINGS & EVERY 53-64 Chancery
    Lane, London WC2A 1HN, (GB)
PATENT (CC, No, Kind, Date): EP 375401 A1 900627 (Basic)
APPLICATION (CC, No, Date): EP 89313368 891220;
PRIORITY (CC, No, Date): GB 8829622 881220
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-015/80**
CITED PATENTS (EP A): GB 1445714 A
CITED REFERENCES (EP A):
  IEEE 1987 SOLID-STATE CIRCUITS CONFERENCE, vol. 30, 1st edition, February
    1987, pages 198-199,399-400, IEEE, New York, US; R. GRONDALSKI: "A VLSI
    chip set for a massively parallel architecture"
  INTERNATIONAL SYMPOSIUM ON NEW DIRECTIONS IN COMPUTING, 12th-14th August
    1985, Trondheim, pages 278-283, IEEE, New York, US; KUMAR et al.: "An
    array architecture for high speed parallel processing";

ABSTRACT EP 375401 A1
    A processor array comprises a number of interconnected processing
  elements (PE). Each processing element (PE) includes row and column
  select inputs connected via respective row and column select lines to a
  control unit (MCU) for the array. The row select inputs in each row and
  the column select inputs in each column are connected in common. The
  processing elements (PE) receive broadcast row and column data over the
  respective row and column select lines.
ABSTRACT WORD COUNT: 78

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 900627 A1 Published application (A1with Search Report
                             ;A2without Search Report)
 Examination: 910109 A1 Date of filing of request for examination:
                             901116
 Withdrawal: 931222 A1 Date on which the European patent application
                             was deemed to be withdrawn: 930701
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
      CLAIMS A   (English) EPABF1   248
      SPEC A   (English) EPABF1   2493
Total word count - document A   2741
Total word count - document B   0
Total word count - documents A + B   2741

INTERNATIONAL PATENT CLASS: **G06F-015/80**

...SPECIFICATION with branches extending to each processing element PE.
    In use the control unit MCU distributes address and **row / column** data
  in the manner described below and also controls the functioning of the
  array by broadcasting control signals to the processing elements **PE** , to
  the decoder DEC and to the multiplexers MUX. Three bit addresses are
  output by the control unit MCU. The decoder DEC shown in detail in
  Figure 4, decodes these addresses to produce appropriate **row** or **column**
  select signals for the processing elements **PE** . The first stage of the
  decoder produces a unique 0 on the **row** or **column** select line of the
  row or **column** that is to be selected. The second stage provides the
  option of an alternative method of addressing the array in which all rows

or **columns** are selected. In any particular instruction the MCU either
broadcasts data to the array, or receives data...

...line in Figure 1) the data paths between the MCU and the array are
provided by single **bidirectional** buses which at different times carry
data both to and from the array.
   In addition to carrying...

 28/5,K/13   (Item 13 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00364202
Motion recognition apparatus
Bewegungserkennungsgerat
Appareil de reconnaissance du mouvement
PATENT ASSIGNEE:
  CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,
    Tokyo, (JP), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;NL)
INVENTOR:
  Omata, Satoshi, 1-5-101 Narusegaoka 1-chome, Machida-shi Tokyo, (JP)
  Shimizu, Hiroshi, 8-608 Yonban-cho, Chiyoda-ku Tokyo, (JP)
  Yamaguchi, Yoko, 6-6-203 Hakusan 2-chome, Bunkyo-ku Tokyo, (JP)
LEGAL REPRESENTATIVE:
  Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick
    Court High Holborn, London WC1R 5DJ, (GB)
PATENT (CC, No, Kind, Date): EP 339867 A2 891102 (Basic)
                              EP 339867 A3 910703
                              EP 339867 B1 960110
APPLICATION (CC, No, Date):   EP 89303926 890420;
PRIORITY (CC, No, Date): JP 88102920 880426
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; NL
INTERNATIONAL PATENT CLASS: **G06F-015/18** ; G06K-009/62
CITED PATENTS (EP A): EP 220077 A; EP 288332 A; EP 183622 A
CITED REFERENCES (EP A):
  BIOLOGICAL CYBERNETICS vol. 51, 1985, Heidelberg pages 325 - 333; OHSUGA
    et al.: "Entrainment of two coupled van der Pol oscillators by an
    external oscillation as a base of "Holonic Control"";

ABSTRACT EP 339867 A2
  A motion-pattern recognition apparatus of this invention is an
apparatus for recognizing the motion of an object contained in physical
image data. The apparatus has an input circuit (1) arranged to photograph
an object and input physical image data upon the object, an arithmetic
circuit (104) connected to the input means for computing a vector
indicative of a variation in the physical image data from the input
physical image data, an image forming circuit (105) connected to the
arithmetic circuit for forming an image corresponding to the motion of
the object from the vector input from the arithmetic circuit in
accordance with a predetermined rule, a memory circuit (106) for
retrievably storing in advance different kinds of conceptualized meaning
of motion, a retrieving circuit (102) connected to the image forming
circuit and the memory circuit for retrieving a conceptualized meaning
close to the image of the motion of the object on the basis of the image
of the motion, and the rule altering circuit (103) connected to the
retrieving circuit and the image forming circuit for altering the
predetermined rule on the basis of the conceptualized meaning retrieved
by the retrieving circuit. Since a loop is formed between the image
forming circuit and the memory circuit, it is possible to form, in the
image forming circuit, an image based on a more exact recognition of the

motion of the object. This loop is of a form analogous to the visual
information processing inherent in living things.
ABSTRACT WORD COUNT: 253

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application:	891102	A2	Published application (A1with Search Report ;A2without Search Report)
Examination:	910306	A2	Date of filing of request for examination: 901231
Search Report:	910703	A3	Separate publication of the European or International search report
Change:	910807	A2	Obligatory supplementary classification (change)
Examination:	930929	A2	Date of despatch of first examination report: 930813
Grant:	960110	B1	Granted patent
Lapse:	961016	B1	Date of lapse of the European patent in a Contracting State: AT 960110
Oppn None:	970102	B1	No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1052
CLAIMS B	(English)	EPAB96	912
CLAIMS B	(German)	EPAB96	835
CLAIMS B	(French)	EPAB96	1008
SPEC A	(English)	EPABF1	11536
SPEC B	(English)	EPAB96	11563
Total word count - document A			12589
Total word count - document B			14318
Total word count - documents A + B			26907

INTERNATIONAL PATENT CLASS: **G06F-015/18 ...**

...SPECIFICATION inter-hypercolumn interference. Let us suppose that the
coefficients of seven interactions which input to a certain **PE** of VP
105 are plotted in the direction of a **vertical** axis with the direction
of **column** as a **horizontal** axis. If every plotted point is on a smooth
curve such as sine curve, the "image" hold...

...SPECIFICATION inter-hypercolumn interference. Let us suppose that the
coefficients of seven interactions which input to a certain **PE** of VP
105 are plotted in the direction of a **vertical** axis with the direction
of **column** as a **horizontal** axis. If every plotted point is on a
smooth curve such as sine curve, the "image" hold...

 28/5,K/14   (Item 14 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00345160
**Circuit for sensing voltages beyond the supply voltage of the sensing
    circuit.**
**Schaltung zum Feststellen von Spannungen unterhalb der Versorgungsspannung
    von Sensorschaltungen.**
**Circuit pour detecter des tensions sous la tension d'alimentation de
    circuits de capteurs.**
PATENT ASSIGNEE:
  IXYS CORPORATION, (1115770), 2355 Zanker Road, San Jose California
    95131-1109, (US), (applicant designated states: DE;FR;GB;IT;NL)

24

INVENTOR:
   Arcus, Christopher G., 15272 Charmeran, San Jose California 95124, (US)
LEGAL REPRESENTATIVE:
   Dipl.-Phys.Dr. Manitz Dipl.-Ing., Dipl.-W.-Ing. Finsterwald Dipl.-Ing.
     Gramkow Dipl.-Chem.Dr. Heyn Dipl.-Phys. Rotermund (100613), Morgan,
     B.Sc.(Phys.) Robert-Koch-Strasse 1, D-8000 Munchen 22, (DE)
PATENT (CC, No, Kind, Date):   EP 346937 A1   891220 (Basic)
APPLICATION (CC, No, Date):   EP 89111012 890616;
PRIORITY (CC, No, Date): US 208310 880617
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: G01R-019/165; **G06F-015/46**
CITED PATENTS (EP A): DE 3537315 A; DE 3632178 A

ABSTRACT EP 346937 A1
   A voltage sensing circuit wherein voltages that appear at first and
   second sensing nodes are converted into first and second currents which
   are proportional to their respective voltages. A comparing circuit
   compares the first current to the second current and generates a
   difference current proportional to the difference between the magnitudes
   of the two currents. A rectifier circuit rectifies the difference
   current, and the difference current is added to a reference current. The
   combined current is applied to the first input terminal of a comparator.
   The second input terminal of the comparator is coupled to a reference
   voltage, and the comparator indicates when the voltage created from the
   combined currents exceeds the reference voltage.
ABSTRACT WORD COUNT: 118

LEGAL STATUS (Type, Pub Date, Kind, Text):
   Application: 891220 A1 Published application (A1with Search Report
                              ;A2without Search Report)
   Examination: 891227 A1 Date of filing of request for examination:
                              891026
   Withdrawal: 930127 A1 Date on which the European patent application
                              was deemed to be withdrawn: 920103
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
       CLAIMS A (English) EPABF1   553
       SPEC A   (English) EPABF1   3987
Total word count - document A   4540
Total word count - document B   0
Total word count - documents A + B   4540

...INTERNATIONAL PATENT CLASS: **G06F-015/46**

...SPECIFICATION conditioning circuitry 45, filter circuits 47, and a clock
   driver 50.
   Host communications circuitry 40 provides a **bidirectional   serial**
   communication **link** on the DATA line with a protocol easily implemented
   by most microprocessors. During **normal** operation, with the RUN//PGM
   HIGH and CHIP ENABLE LOW, the host communication circuitry receives a 3-
   bit   serial command word on the DATA line. Pulses on the WRITE line
   clock the data bits into the...

...handshake clock pulses appear on the READ line. In the programming mode,
   with RUN//PGM, LOW, 7- **bit   serial** words are transmitted to chip 27 to
   set the subsystem's default conditions, sense input's set...

28/5,K/15   (Item 15 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00306062
Digital data processing system.
Digitales Datenverarbeitungssystem.
Systeme du traitement de donnees numeriques.
PATENT ASSIGNEE:
  DATA GENERAL CORPORATION, (410940), Route 9, Westboro Massachusetts 01581
    , (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
  Bratt, Richard Glenn, 9 Brook Trail Road, Wayland Massachusetts 01778,
    (US)
  Clancy, Gerald F., 13069 Jaccaranda Center, Saratoga California 95070,
    (US)
  Gavrin, Edward S., Beaver Pond Road RFD 4, Lincoln Massachusetts 01773,
    (US)
  Gruner, Ronald Hans, 112 Dublin Wood Drive, Cary North Carolina 27514,
    (US)
  Mundie, Craig James, 136 Castlewood Drive, Cary North Carolina, (US)
  Schleimer, Stephen I., 1208 Ellen Place, Chapel Hill North Carolina 27514
    , (US)
  Wallach, Steven J., 12436 Green Meadow Lane, Saratoga California 95070,
    (US)
LEGAL REPRESENTATIVE:
  Robson, Aidan John et al (69471), Reddie & Grose 16 Theobalds Road,
    London WC1X 8PL, (GB)
PATENT (CC, No, Kind, Date): EP 300516 A2 890125 (Basic)
                              EP 300516 A3 890426
                              EP 300516 B1 931124
APPLICATION (CC, No, Date):   EP 88200921 820521;
PRIORITY (CC, No, Date): US 266413 810522; US 266539 810522; US 266521
    810522; US 266415 810522; US 266409 810522; US 266424 810522; US 266421
    810522; US 266404 810522; US 266414 810522; US 266532 810522; US 266403
    810522; US 266408 810522; US 266401 810522; US 266524 810522
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE
RELATED PARENT NUMBER(S) - PN (AN):
  EP 67556 (EP 823025960)
INTERNATIONAL PATENT CLASS: **G06F-009/46 ; G06F-012/14**
CITED REFERENCES (EP A):
  PROCEEDINGS OF THE SPRING JOINT COMPUTER CONFERENCE, Atlantic City, 1972,
    pages 417-429, Afips Press; G.S. GRAHAM et al.: "Protection-Principles
    and practice"
  IDEM.
  COMPCON SPRING'80, digest of papers, San Francisco, 25th-28th February
    1980, pages 340-343, IEEE, New York, US; T.D. McCREERY: "The X-tree
    operating system: Bottom layer"
  IDEM.
  COMPUTER ARCHITECTURE NEWS, October 1980, pages 4-11; J. RATTNER et al.:
    "Object-based computer architecture"
  A.S. TANENBAUM: "Structured computer organization", 1976, pages 264-268,
    Prentice-Hall, Inc., Englewood Cliffs, New Jersey, US
  IBM TECHNICAL DISCLOSURE BULLETIN, vol. 22, no. 3, August 1979, pages
    1286-1289, New York, US; D.B. LOMET: "Regions for controlling the
    propagation of addressability in capability systems";

ABSTRACT EP 300516 A2
    The system has memory storing data and instructions and processing
means. Memory is organized into objects identified by unique identifiers
(UIDs) comprising a logical allocation unit identifier (LAUID) and an
object serial number (OSN) provided by an architectural clock, associated
with an offset (O) and length (L) enabling logical addresses to be

derived. Instructions (SIN's) are in an intermediate level language –
(SOP's = S – language operations). Associated names (NAME A, NAME B)
point to name tables which identify subjects to which the processor may
respond in relation to the instruction in question. Protection is
afforded by restricting access to memory operations to a subject
pertaining to the set of subjects pertaining to the object in question.

ABSTRACT WORD COUNT: 122

LEGAL STATUS (Type, Pub Date, Kind, Text):
Lapse: 20000209 B1 Date of lapse of European Patent in a
                               contracting state (Country, date): AT
                               19931124, BE 19931124, FR 19940415, IT
                               19931124, LU 19940531, NL 19931124, SE
                               19931124,
Application: 890125 A2 Published application (A1with Search Report
                             ;A2without Search Report)
Search Report: 890426 A3 Separate publication of the European or
                             International search report
Examination: 891206 A2 Date of filing of request for examination:
                             891011
Examination: 920115 A2 Date of despatch of first examination report:
                             911202
Grant: 931124 B1 Granted patent
Lapse: 940713 B1 Date of lapse of the European patent in a
                             Contracting State: SE 931124
Lapse: 940810 B1 Date of lapse of the European patent in a
                             Contracting State: AT 931124, SE 931124
Change: 940810 B1 Representative (change)
Lapse: 940928 B1 Date of lapse of the European patent in a
                             Contracting State: AT 931124, NL 931124, SE
                             931124
Oppn None: 941117 B1 No opposition filed
Lapse: 941130 B1 Date of lapse of the European patent in a
                             Contracting State: AT 931124, BE 931124, NL
                             931124, SE 931124
Lapse: 950118 B1 Date of lapse of the European patent in a
                             Contracting State: AT 931124, BE 931124, FR
                             940415, NL 931124, SE 931124
Lapse: 991020 B1 Date of lapse of European Patent in a
                             contracting state (Country, date): AT
                             19931124, BE 19931124, FR 19940415, IT
                             19931124, NL 19931124, SE 19931124,
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1018
CLAIMS B	(German)	EPBBF1	868
CLAIMS B	(French)	EPBBF1	1115
SPEC B	(English)	EPBBF1	154256
Total word count – document A			0
Total word count – document B			157257
Total word count – documents A + B			157257

INTERNATIONAL PATENT CLASS: **G06F-009/46** ...

... **G06F-012/14**

...SPECIFICATION and from IOS 116 to MEM 112 through MIO Bus 129. IOMC Bus
131 is comprised of **bi – directional** control signals coordinating
operation of MEM 112 and IOS 116. IOS 116 also has an interface to...

10112 and IOS 10116. Other such independently operating processors, for example, special arithmetic processors such as an **array** processor, or multiple FU 10120's, may be added to the present CS 10110.

In this regard...onto MOD Bus 10144 or MIO Bus 10129 when, respectively, driver gate enable signal Drive Assembly to **Mod** Bus (DRVASYMOD) to ASYMOD 23040 or Drive Assembly to MIO Bus (DRVASYMIO) to ASYMIO 23042 are asserted...

28/5,K/16   (Item 16 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00306058
Digital data processing system.
Digitales Datenverarbeitungssystem.
Systeme de traitement de donnees numeriques.
PATENT ASSIGNEE:
  DATA GENERAL CORPORATION, (410940), Route 9, Westboro Massachusetts 01581
  , (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
  Bachman, Brett L., 214 W. Canton Street Suite 4, Boston Massachusetts
    02116, (US)
  Bernstein, David H., 41 Bay Colony Drive, Ashland Massachusetts 01721,
    (US)
  Bratt, Richard Glenn, 9 Brook Trail Road, Wayland Massachusetts 01778,
    (US)
  Clancy, Gerald F., 13069 Jaccaranda Center, Saratoga California 95070,
    (US)
  Gavrin, Edward S., Beaver Pond Road RFD 4, Lincoln Massachusetts 01773,
    (US)
  Gruner, Ronald Hans, 112 Dublin Wood Drive, Cary North Carolina 27514,
    (US)
  Jones, Thomas M. Jones, 300 Reade Road, Chapel Hill North Carolina 27514,
    (US)
  Katz, Lawrence H., 10943 S. Forest Ridge Road, Oregon City Oregon 97045,
    (US)
  Mundie, Craig James, 136 Castlewood Drive, Cary North Carolina, (US)
  Pilat, John F., 1308 Ravenhurst Drive, Raleigh North Carolina 27609, (US)
  Richmond, Michael S., Fearringtn Post Box 51, Pittsboro North Carolina
    27312, (US)
  Schleimer Stephen I., 1208 Ellen Place, Chapel Hill North Carolina 27514,
    (US)
  Wallach, Steven J., 12436 Green Meadow Lane, Saratoga California 95070,
    (US)
  Wallach, Walter, A., Jr., 1336 Medfield Road, Raleigh North Carolina
    27607, (US)
LEGAL REPRESENTATIVE:
  Robson, Aidan John et al (69471), Reddie & Grose 16 Theobalds Road,
    London WC1X 8PL, (GB)
PATENT (CC, No, Kind, Date):   EP 290111 A2   881109 (Basic)
                               EP 290111 A3   890503
                               EP 290111 B1   931222
APPLICATION (CC, No, Date):   EP 88200917 820521;
PRIORITY (CC, No, Date): US 266404 810522
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE
RELATED PARENT NUMBER(S) - PN (AN):
  EP 67556 (EP 823025960)
INTERNATIONAL PATENT CLASS: **G06F-009/30**
CITED PATENTS (EP A): US 3902163 A
CITED REFERENCES (EP A):

COMPUTER ARCHITECTURE NEWS, October 1980, pages 4-11; J. RATTNER et al.:
"Object-based computer architecture"
DIGEST OF PAPERS, COMPCON SPRING 1980, 20TH IEEE COMPUTER SOCIETY
INTERNATIONAL CONFERENCE, San Francisco, California, 25th-28th February
1980, pages 340-343, IEEE, New York, US; T.D. McCREERY; "The X-tree
operating system: bottom layer"
PROCEEDINGS OF THE SPRING JOINT COMPUTER CONFERENCE, 1972, pags 417-429,
Afips Press, Atlantic City, N.J., US; G. SCOTT GRAHAM et al.:
"Protection - Principles and practice";

ABSTRACT EP 290111 A2
A digital computer system has a memory system organized into objects
(10213) for storing items of information and a processor for processing
data in response to instructions. An object identifier code is associated
with each object. The objects include procedure objects (10312, 10314,
10316) and data objects. The procedure objects contain procedures
including the instructions (10344) and name tables (10350) associated
with the procedures. The instructions contain operation codes and names
representing data. Each name corresponds to a name table entry in the
name table (10350) associated with the procedure. The name table for a
name contains information from which the processor may determine the
location and the format for the data (e.g. an operand) represented by the
name.
ABSTRACT WORD COUNT: 123

LEGAL STATUS (Type, Pub Date, Kind, Text):
Lapse: 20000209 B1 Date of lapse of European Patent in a
                            contracting state (Country, date): AT
                            19931222, BE 19931222, FR 19940513, IT
                            19931222, LU 19940531, NL 19931222, SE
                            19931222,
Application: 881109 A2 Published application (A1with Search Report
                          ;A2without Search Report)
Search Report: 890503 A3 Separate publication of the European or
                          International search report
Examination: 891220 A2 Date of filing of request for examination:
                          891026
Examination: 920115 A2 Date of despatch of first examination report:
                          911202
Grant: 931222 B1 Granted patent
Change: 940810 B1 Representative (change)
Lapse: 940928 B1 Date of lapse of the European patent in a
                          Contracting State: NL 931222
Lapse: 941026 B1 Date of lapse of the European patent in a
                          Contracting State: NL 931222, SE 931222
Lapse: 941117 B1 Date of lapse of the European patent in a
                          Contracting State: AT 931222, NL 931222, SE
                          931222
Lapse: 941130 B1 Date of lapse of the European patent in a
                          Contracting State: AT 931222, BE 931222, NL
                          931222, SE 931222
Oppn None: 941214 B1 No opposition filed
Lapse: 950118 B1 Date of lapse of the European patent in a
                          Contracting State: AT 931222, BE 931222, FR
                          940513, NL 931222, SE 931222
Lapse: 991020 B1 Date of lapse of European Patent in a
                          contracting state (Country, date): AT
                          19931222, BE 19931222, FR 19940513, IT
                          19931222, NL 19931222, SE 19931222,
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:

```
Available Text   Language    Update     Word Count
       CLAIMS B  (English)   EPBBF1        1044
       CLAIMS B  (German)    EPBBF1         890
       CLAIMS B  (French)    EPBBF1        1185
       SPEC B    (English)   EPBBF1      154314
Total word count - document A                 0
Total word count - document B            157433
Total word count - documents A + B       157433
```

INTERNATIONAL PATENT CLASS: **G06F-009/30**

...SPECIFICATION and operation of Process Structures 10210, VP State Block
10218 will be described next below.
C. Virtual **Processor** State Blocks and Virtual Process Creation (Fig.
102)
   Referring again to Fig. 102, VP State Blocks 10218...be selected from
input provided from JPD Bus 10142, MOD Bus 10144, and IOM Bus 10130. In
certain cases , an FIU 20120 data input may comprise two thirty-two bit
words, for example, when a cross...

 28/5,K/17   (Item 17 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00306057
Digital data processing system.
Digitales Datenverarbeitungssystem.
Systeme de traitement de donnees numeriques.
PATENT ASSIGNEE:
 DATA GENERAL CORPORATION, (410940), Route 9, Westboro Massachusetts 01581
  , (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
 Bachman, Brett L., 214 W. Canton Street Suite 4, Boston Massachusetts
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  (US)
 Bratt, Richard Glenn, 9 Brook Trail Road, Wayland Massachusetts 01778,
  (US)
 Clancy, Gerald F., 13069 Jaccaranda Center, Saratoga California 95070,
  (US)
 Gavrin, Edward S., Beaver Pond Road RFD 4, Lincoln Massachusetts 01773,
  (US)
 Jones, Thomas M. Jones, 300 Reade Road, Chapel Hill North Carolina 27514,
  (US)
 Katz, Lawrence H., 10943 S. Forest Ridge Road, Oregon City Oregon 97045,
  (US)
 Mundie, Craig James, 136 Castlewood Drive, Cary North Carolina, (US)
 Pilat, John F., 1308 Ravenhurst Drive, Raleigh North Carolina 27609, (US)
 Schleimer, Stephen I., 1208 Ellen Place, Chapel Hill North Carolina 27514
  , (US)
 Wallach, Steven J., 12436 Green Meadow Lane, Saratoga California 95070,
  (US)
 Wells, Douglas, M., 106 Robin Road, Chapel Hill North Carolina 27514,
  (US)
LEGAL REPRESENTATIVE:
 Pears, David Ashley et al (34761), REDDIE & GROSE 16 Theobalds Road,
  London WC1X 8PL, (GB)
PATENT (CC, No, Kind, Date): EP 290110 A2 881109 (Basic)
                              EP 290110 A3 890412
APPLICATION (CC, No, Date):   EP 88200916 820521;

PRIORITY (CC, No, Date): US 266401 810522
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE
RELATED PARENT NUMBER(S) - PN (AN):
  EP 67556
INTERNATIONAL PATENT CLASS: **G06F-012/06 ; G06F-009/30**
CITED PATENTS (EP A): FR 2408176 A; EP 10185 A; FR 2253422 A
CITED REFERENCES (EP A):
  SYSTEMES-COMPUTERS-CONTROLS, vol. 10, no. 6, November/December 1979,
    pages 41-50, Scripta Publishing Co., Silver Spring, Maryland, US; K.
    TAMARU et al.: "A high-performance microcomputer PMCS"
  COMPUTER ARCHITECTURE NEWS, October 1980, pages 4-11; J. RATTNER et al.:
    "Object-based computer architecture"
  IBM TECHNICAL DISCLOSURE BULLETIN, vol. 19, no. 1, June 1976, pages
    67-70, New York, US; T.J. DVORAK et al.: "Hardware assist for microcode
    execution of storage-to-storage move instructions";

ABSTRACT EP 290110 A2
    A digital computer system in which data storage is referred to by a
  descriptor comprising an object number (AON 27111) denoting a
  variable-length block of storage, an offset (OFF 27113) indicating how
  far into that block a desired data item begins, and a length field (LEN
  27115) denoting the length of the desired data item. Separate means exist
  for manipulating each of the three descriptor portions, thus facilitating
  repetitive operations on related or contiguous operands. Various levels
  of microcode control are included. Each level of microcode control has
  its own stack (902-905) facilitating interrupts between levels. Stacks
  are duplicated in "secure stacks" (504) in memory to protect against loss
  of state data from the stacks.
ABSTRACT WORD COUNT: 119

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 881109 A2 Published application (A1with Search Report
                               ;A2without Search Report)
  Search Report: 890412 A3 Separate publication of the European or
                               International search report
  Examination: 891206 A2 Date of filing of request for examination:
                               891011
  Examination: 920122 A2 Date of despatch of first examination report:
                               911205
  Refusal: 931124 A2 Date on which the European patent application
                               was refused: 930710
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
      CLAIMS A   (English) EPABF1   1390
      SPEC A   (English) EPABF1   155314
Total word count - document A   156704
Total word count - document B   0
Total word count - documents A + B 156704

INTERNATIONAL PATENT CLASS: **G06F-012/06 ...**
... G06F-009/30

...SPECIFICATION operates as a unitary structure. That is, a particular
  address provided to GRF 10354 will address corresponding **horizontal**
  segments of each of GRF 10354's three sections residing in AONP 20216,
  OFFP 20218, and LENP...

...connected from, respectively, MOD Bus 10144 and JPD Bus 10142. OFFMUX
  20240 also has a fourth 5 **bit** data input connected from Bias Logic
  (BIAS) 20246 and LENP 20220, described further below, and fifth 16...

28/5,K/18   (Item 18 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00291721
Linear chain of parallel processors and method of using same. `
Lineare Kette von Parallelprozessoren und Benutzungsverfahren davon.
Chaine lineaire de processeurs paralleles et sa methode d'utilisation de celle-ci.
PATENT ASSIGNEE:
  Applied Intelligent Systems, Inc., (973900), 110 Parkland Plaza, Ann
    Arbor, Michigan 48103, (US), (applicant designated states: DE;FR;GB;NL)
INVENTOR:
  Wilson, Stephen S., 366 Hilldale Ann Arbor, Michigan 48015, (US)
LEGAL REPRESENTATIVE:
  Patentanwalte Viering & Jentschura (100641), Postfach 22 14 43, D-80504
    Munchen, (DE)
PATENT (CC, No, Kind, Date):   EP 293700 A2 881207 (Basic)
                               EP 293700 A3 891018
                               EP 293700 B1 950201
APPLICATION (CC, No, Date):   EP 88108175 880520;
PRIORITY (CC, No, Date): US 57128 870601
DESIGNATED STATES: DE; FR; GB; NL
INTERNATIONAL PATENT CLASS: **G06F-015/76**
CITED PATENTS (EP A): EP 6748 A; EP 150449 A
CITED REFERENCES (EP A):
  IEEE CONFERENCE PROCEEDINGS OF THE 13TH ANNUAL INTERNATIONAL SYMPOSIUM ON
    COMPUTER ARCHITECTURE
  COMPUTER
  idem
  idem
  IEEE JOURNAL OF SOLID-STATE CIRCUITS
  IEEE TRANSACTIONS ON COMPUTERS
  IEEE TRANSACTIONS ON COMPUTERS;

ABSTRACT EP 293700 A2
    A system (9) for processing data matrices such as images and spatially
  related data includes a plurality of neighborhood processing units
  (10a-10n; 30a-30h) connected in a linear chain with direct data
  communication links (11a-11n, 21a-21n) between adjacent processing units.
  A sequence of instructions are sent to the processing units by a single
  controller (27), whereby all neighborhood processing units in the system
  receive the same instruction at any given cycle in the instruction
  sequence. The width of the data matrix array is the same as a number of
  processors, so that there is one processor per column in the data matrix.
  The memory (13a-13n) associated with each processor (10a-10n) is external
  and large enough to hold the entire image or data matrix. The processors
  are able to operate arithmetically in a serial or parallel mode, where an
  efficient means is provided to transpose 8 x 8 bit submatrices between
  the two modes. An indirect addressing arrangement (43h, 55h, 130, 131) is
  provided which operates on byte-wide memories (13a-13h; 132) external to
  the processing units (130).
ABSTRACT WORD COUNT: 179

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 881207 A2 Published application (A1with Search Report
                             ;A2without Search Report)
  Change: 881214 A2 Representative (change)
  *Assignee: 881214 A2 Applicant (transfer of rights) (change):

			Applied Intelligent Systems, Inc. (973900) 110 Parkland Plaza Ann Arbor, Michigan 48103 (US) (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
*Assignee:	881214	A2	Previous applicant in case of transfer of rights (change): EATON CORPORATION (218422) Eaton Center Cleveland Ohio 44114 (US) (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE), Applied Intelligent Systems, Inc. (973900) 110 Parkland Plaza Ann Arbor, Michigan 48103 (US) (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
Change:	890607	A2	Designated Contracting States (change)
Search Report:	891018	A3	Separate publication of the European or International search report
Examination:	900221	A2	Date of filing of request for examination: 891220
Examination:	910904	A2	Date of despatch of first examination report: 910717
Change:	940330	A2	Representative (change)
Grant:	950201	B1	Granted patent
Oppn None:	960124	B1	No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPBBF2	2110
CLAIMS B	(English)	EPBBF2	1660
CLAIMS B	(German)	EPBBF2	1436
CLAIMS B	(French)	EPBBF2	1840
SPEC A	(English)	EPBBF2	10950
SPEC B	(English)	EPBBF2	9901
Total word count – document A			13060
Total word count – document B			14837
Total word count – documents A + B			27897

INTERNATIONAL PATENT CLASS: **G06F-015/76**

...SPECIFICATION wide memories 13a-13n. Each individual processing unit is respectively associated with an individual single-bit-wide **column** by multiple **row** memory, e.g., processing unit 10i is associated with memory 13i. The processor units are shown in...

...example. Each neighborhood processing unit 10a-10n also connects to associated memories 13a-13n by means of **bidirectional** data transfer lines 12a-12n. Data input device 20 provides a stream of data to first processing...

...SPECIFICATION wide memories 13a-13n. Each individual processing unit is respectively associated with an individual single-bit-wide **column** by multiple **row** memory, e.g., processing unit 10i is associated with memory 13i. The processor units are shown in...

...example. Each neighborhood processing unit 10a-10n also connects to associated memories 13a-13n by means of **bidirectional** data transfer lines 12a-12n. Data input device 20 provides a stream of data to first processing...

28/5,K/19   (Item 19 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00246190
Random access memory circuits
Speicher mit wahlfreiem Zugriff
Memoire a acces selectif
PATENT ASSIGNEE:
  ADVANCED MICRO DEVICES, INC., (328120), 901 Thompson Place P.O. Box 3453,
    Sunnyvale, CA 94088-3453, (US), (applicant designated states:
    AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
INVENTOR:
  Spak, Michael E., Route 1, Box 170, Kyle, Texas 78640, (US)
  Tyl, Craig S., 11636 Parkfield Drive, Austin Texas 78758, (US)
  Wottrich, Philip C., 7403 Scenic Brook Drive, Austin Texas 78736, (US)
LEGAL REPRESENTATIVE:
  Sanders, Peter Colin Christopher et al (35571), BROOKES & MARTIN High
    Holborn House 52/54 High Holborn, London WC1V 6SE, (GB)
PATENT (CC, No, Kind, Date):   EP 237337   A2   870916 (Basic)
                                EP 237337   A3   900606
                                EP 237337   B1   970108
APPLICATION (CC, No, Date):   EP 87302084 870311;
PRIORITY (CC, No, Date): US 838993 860312
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-007/00** ; G11C-019/00
CITED PATENTS (EP A): US 3760368 A
CITED REFERENCES (EP A):
  IBM TECHNICAL DISCLOSURE BULLETIN, vol. 15, no. 9, February 1973, pages
    2949-2950, Armonk, N.Y., US; KEMERER: "Bidirectional FET shift
    register"
  IDEM
  IDEM
  FUNKSCHAU, vol. 49, no. 1, 1977, paes 47-54, Munich, DE; ANONYMOUS: "Das
    Schieberegister"
  IBM TECHNICAL DISCLOSURE BULLETIN, vol. 20, no. 12, May 1978, pages
    5152-5155, Armonk, N.Y., US; HANNA: "Ordered table memory with
    random-access addressing"
  IDEM;

ABSTRACT EP 237337 A2
    Random access memory circuits.
    A fracturable x-y random access memory array for performing pushing and
popping of data and fracturing the array simultaneously at a common
address includes a row fracture circuit responsive to row addresses to
fracture the array in the Y-direction and a column fracture circuit
responsive to column addresses for fracturing the array in the
X-direction. A plurality of memory cells are stacked in a plurality of
columns to form an x-y organization which can be randomly accessed in
response to the row and column addresses. The memory cells are responsive
to a shift control driver circuit for bidirectional shifting of data by
either pushing data into or popping data from at any point within one of
the plurality of randomly addressable column at the same row and column
addresses used to fracture the array defining a fracture point. Data in
all the memory cells in the array with addresses higher (or lower) than
the fracture point shift and the memory cells with addresses lower (or
higher) than the fracture point maintain their data unchanged. A unique
memory cell is also provided which is formed of a pair of cross-coupled
latches which includes means for controlling a bidirectional shift by
switching off power to one of the cross-coupled latches.
ABSTRACT WORD COUNT: 214

LEGAL STATUS (Type, Pub Date, Kind, Text):

```
Lapse:              001213 B1 Date of lapse of European Patent in a
                              contracting state (Country, date):  AT
                              19970108, BE 19970108, CH 19970414, LI
                              19970414, GR 19970108, IT 19970108, LU
                              19970331, SE 19970408,
Lapse:              20000126 B1 Date of lapse of European Patent in a
                              contracting state (Country, date):  AT
                              19970108, BE 19970108, GR 19970108, IT
                              19970108, SE 19970408,
Lapse:              001227 B1 Date of lapse of European Patent in a
                              contracting state (Country, date):  AT
                              19970108, BE 19970108, CH 19970108, LI
                              19970108, GR 19970108, IT 19970108, LU
                              19970331, SE 19970408,
Application:        870916 A2 Published application (A1with Search Report
                              ;A2without Search Report)
Lapse:              20000209 B1 Date of lapse of European Patent in a
                              contracting state (Country, date):  AT
                              19970108, BE 19970108, GR 19970108, IT
                              19970108, LU 19970331, SE 19970408,
Change:             871007 A2 Inventor (change)
Search Report:      900606 A3 Separate publication of the European or
                              International search report
Examination:        900822 A2 Date of filing of request for examination:
                              900625
Examination:        930317 A2 Date of despatch of first examination report:
                              930203
Grant:              970108 B1 Granted patent
Lapse:              971015 B1 Date of lapse of the European patent in a
                              Contracting State: AT 970108
Lapse:              971203 B1 Date of lapse of the European patent in a
                              Contracting State: AT 970108, BE 970108
Oppn None:          980107 B1 No opposition filed
Lapse:              980311 B1 Date of lapse of the European patent in a
                              Contracting State: AT 970108, BE 970108, SE
                              970408
Lapse:              991020 B1 Date of lapse of European Patent in a
                              contracting state (Country, date):  AT
                              19970108, BE 19970108, IT 19970108, SE
                              19970408,
```

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB97	1441
CLAIMS B	(German)	EPAB97	1267
CLAIMS B	(French)	EPAB97	1566
SPEC B	(English)	EPAB97	8280

Total word count - document A   0
Total word count - document B   12554
Total word count - documents A + B   12554
INTERNATIONAL PATENT CLASS: **G06F-007/00 ...**

...SPECIFICATION it from a lower address. It should be understood to those
  skilled in the art that the **single - bit** memory cell B100 could be
  replaced by an eight-bit word of storage elements arranged in a
  horizontal   row . In this case, the gates G42 and G43 would drive the
  eight bits in parallel. Similarly, the...

...As a result, words rather than bits would then be connected in a series
  chain in each **column** so as to permit **bidirectional** shifting between
  corresponding bit locations of adjacent words. It will also be noted that

35

the bottom of one **column** (**column** (0 slash)) and the top of the next **column** (**column** 1) are interconnected or linked by a shift line 27a and data lines 27b, 27c. This would be repeated for each of the **columns** in a given matrix.

The input/output circuit 28a for the column zero includes a sense amplifier...

28/5,K/20   (Item 20 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00227825
Test method and apparatus for cellular array processor chip.
Testverfahren und Gerat fur zellularen Feldprozessorchip.
Methode et appareil de test pour puce de processeur en reseau cellulaire.
PATENT ASSIGNEE:
  ITT INDUSTRIES INC., (209950), 320 Park Avenue, New York, NY 10022, (US),
    (applicant designated states: DE;FR;GB;IT;NL)
INVENTOR:
  Morton, Steven Gregory, 39 Old Good Hill Road, Oxford, CT 06483, (US)
LEGAL REPRESENTATIVE:
  Klunker . Schmitt-Nilson . Hirsch (101001), Winzererstrasse 106, D-8000
    Munchen 40, (DE)
PATENT (CC, No, Kind, Date):   EP 228949 A2   870715 (Basic)
                               EP 228949 A3   890614
APPLICATION (CC, No, Date):   EP 86402742 861210;
PRIORITY (CC, No, Date): US 808418 851212
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: **G06F-015/06 ;   G06F-011/20 ;   G06F-011/26**
CITED PATENTS (EP A): US 3813650 A; US 3813650 A; US 4541090 A; US 4541090
  A; EP 102296 A; US 4191996 A
ABSTRACT EP 228949 A2

  A cellular array processor chip includes a common bus communicating
  with the individual cells thereof. The common bus can be monitored during
  chip testing to detect the presence, or absence, of a defective cell.
  Each cell can be inactivated with respect to the common bus. During
  testing if the presence of a defective cell is determined to exist each
  cell is individually tested until a defective cell is located. That cell
  is inactivated and the chip testing is resumed until all defective cells
  are located and inactivated.
ABSTRACT WORD COUNT: 91

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 870715 A2 Published application (A1with Search Report
                              ;A2without Search Report)
  Change: 870826 A2 Representative (change)
  Change: 871021 A2 Representative (change)
  Change: 890322 A2 Representative (change)
  Change: 890607 A2 Representative (change)
  Change: 890607 A2 Obligatory supplementary classification
                              (change)
  Search Report: 890614 A3 Separate publication of the European or
                              International search report
  Withdrawal: 900801 A2 Date on which the European patent application
                              was deemed to be withdrawn: 891215
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	358
SPEC A	(English)	EPABF1	25364

Total word count – document A   25722
Total word count – document B   0
Total word count – documents A + B   25722

INTERNATIONAL PATENT CLASS: **G06F-015/06** ...

... **G06F-011/20** ...

... **G06F-011/26**

...SPECIFICATION operation of the Vector IF/ELSE instruction is explained
  in Figure 86.
     Figure 84 shows a cellular **processor   array** with controller. The key
  elements of this **processor   array** are the 4 by 4 matrix of array
  chips, numbers 13,000 to 13,006 which shows...
...The array chips in a column are connected by a vertical bus as 13,011 to
  a **vertical   memory** as 13,007. The cells in these array chips share
  this **vertical   memory** on a time division multiplex basis, first
  between the chips and then between the cells within a...

...would typically be connected to the horizontal memory and the Y bus is
  typically connected to the **vertical   memory** . Connections between
  adjacent chips are made by the left/right connections as 13,013 and the
  right...

 28/5,K/21   (Item 21 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00227824
Two-wire/three-port RAM for cellular array processor.
RAM-Speicher mit zwei Linien und drei Porten fur zellularen Feldprozessor.
Memoire RAM a deux lignes et trois portes pour processeur en reseau
    cellulaire.
PATENT ASSIGNEE:
  ITT INDUSTRIES INC., (209950), 320 Park Avenue, New York, NY 10022, (US),
    (applicant designated states: DE;FR;GB;IT;NL)
INVENTOR:
  Morton, Steven Gregory, 39 Old Good Hill Road, Oxford, CT 06483, (US)
LEGAL REPRESENTATIVE:
  Klunker . Schmitt-Nilson . Hirsch (101001), Winzererstrasse 106, D-8000
    Munchen 40, (DE)
PATENT (CC, No, Kind, Date): EP 234147 A2 870902 (Basic)
                              EP 234147 A3 890607
APPLICATION (CC, No, Date):   EP 86402741 861210;
PRIORITY (CC, No, Date): US 808393 851212
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: **G06F-015/06** ; G11C-008/00
CITED PATENTS (EP A): US 3968480 A; US 4541076 A; EP 121763 A
CITED REFERENCES (EP A):
  IEEE MICRO, December 1985, IEEE, pages 37-49; S.G. MORTON et al.: "ITT
    CAP - toward a personal supercomputer";

ABSTRACT EP 234147 A2
    A multiport memory includes first and second signal lines. Each signal
  line can simultaneously and independently access a particular address
  during a read memory portion of a clock pulse whereas both signal lines
  are used to write data to one address during another portion of the clock
  pulse.
ABSTRACT WORD COUNT: 52

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 870902 A2 Published application (A1with Search Report
                                  ;A2without Search Report)
  Change: 871021 A2 Representative (change)
  Change: 890322 A2 Representative (change)
  Search Report: 890607 A3 Separate publication of the European or
                                  International search report
  Change: 890607 A2 Obligatory supplementary classification
                                  (change)
  Withdrawal: 900801 A2 Date on which the European patent application
                                  was deemed to be withdrawn: 891208
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
     CLAIMS A   (English)   EPABF1   351
     SPEC A   (English)   EPABF1   25391
Total word count - document A   25742
Total word count - document B   0
Total word count - documents A + B   25742

INTERNATIONAL PATENT CLASS: **G06F-015/06** ...

...SPECIFICATION operation of the Vector IF/ELSE instruction is explained
in Figure 86.
   Figure 84 shows a cellular **processor   array** with controller. The key
elements of this **processor   array** are the 4 by 4 matrix of array
chips, number 13,000 to 13,006 which shows...

...The array chips in a column are connected by a vertical bus as 13,011 to
a **vertical   memory** as 13,007. The cells in these array chips share
this **vertical   memory** on a time division multiplex basis, first
between the chips and then between the cells within a...

...would typically be connected to the horizontal memory and the Y bus is
typically connected to the **vertical   memory** . Connections between
adjacent chips are made by the left/right connections as 13,013 and the
right...

 28/5,K/22   (Item 22 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00227823
**Cellular array processing apparatus with variable nesting depth vector
    processor control structure.**
**Zellularer Feldprozessor mit einer Vektorprozessorsteuerungsstruktur, die
    eine variable Verschachtelungstiefe aufweist.**
**Processeur en reseau cellulaire utilisant une structure de commande de
    processeur vectoriel a profondeur d'emboitement variable.**
PATENT ASSIGNEE:
  ITT INDUSTRIES INC., (209950), 320 Park Avenue, New York, NY 10022, (US),
     (applicant designated states: DE;FR;GB;IT;NL)
INVENTOR:
  Morton, Steven Gregory, 39 Old Good Hill Road, Oxford, CT 06483, (US)
LEGAL REPRESENTATIVE:
  Klunker . Schmitt-Nilson . Hirsch (101001), Winzererstrasse 106, D-8000
     Munchen 40, (DE)
PATENT (CC, No, Kind, Date): EP 231686 A2 870812 (Basic)
                              EP 231686 A3 890614

APPLICATION (CC, No, Date):   EP 86402740 861210;
PRIORITY (CC, No, Date): US 808305 851212
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: **G06F-015/06**
CITED PATENTS (EP A): EP 121763 A; EP 223690 A
CITED REFERENCES (EP A):
  IEEE MICRO, December 1985, pages 37-49, IEEE; S.G. Morton et al.: "ITT
    CAP-toward a personal supercomputer"
  ELECTRONICS, vol. 58, no. 49, 9th December 1985, pages 40-41, New York,
    US; ITT takes pared-down approach to wafer-scale ICs"
  H.S. STONE et al.: "Introduction to computer architecture", 1975, pages
    333-338, Science Research Associates, Inc.
  IEEE JOURNAL OF SOLID-STATE CIRCUITS, vol. SC-21, no. 5, October 1986,
    pages 820-826, IEEE, New York, US; S.G. MORTON et al.: "The dynamically
    reconfigurable CAP array chip I";

ABSTRACT EP 231686 A2
    A processor cell is described that may be integrated with a
multiplicity of dynamically reconfigurable 16-bit slices to enable and
disable arbitrary collections of processing elements under software
control according to the data that they are operating upon. The structure
allows a collection of word sizes to be defined and then for certain
processing elements to be enabled or disabled according to the data that
they are operating upon. A slave mechanism is described wherein for words
comprised of a multiplicity of slices the most significant slice is in
control and the other slices are slaved or forced to go along with the
operation of the most significant slice. This slaving is obtained
automatically without the necessity to explicitly coordinate the
operation of the multiplicity of slices cooperated together to form a
word. The cell includes a Find and Lose operation wherein a scaler
control means selects one from a multiplicity of processors satisfying
some condition. The apparatus finds the first cell satisfying some
condition and operates upon that processor cell when the operation upon
that processor is completed, the apparatus looses that processor and then
goes on to the next processor satisfying the condition and so on.
ABSTRACT WORD COUNT: 202

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 870812 A2 Published application (A1with Search Report
                          ;A2without Search Report)
  Change: 870819 A2 Representative (change)
  Change: 871021 A2 Representative (change)
  Change: 890322 A2 Representative (change)
  Change: 890531 A2 Representative (change)
  Search Report: 890614 A3 Separate publication of the European or
                          International search report
  Withdrawal: 900808 A2 Date on which the European patent application
                          was deemed to be withdrawn: 891215
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
     CLAIMS A (English)   EPABF1   447
     SPEC A   (English)   EPABF1   25339
Total word count - document A   25786
Total word count - document B   0
Total word count - documents A + B 25786

INTERNATIONAL PATENT CLASS: **G06F-015/06**

...SPECIFICATION operation of the Vector IF/ELSE instruction is explained
  in Figure 86.

Figure 84 shows a cellular **processor** **array** with controller. The key
elements of this **processor** **array** are the 4 by 4 matrix of array
chips, numbers 13,000 to 13,006 which shows...

...The array chips in a column are connected by a vertical bus as 13,011 to
a **vertical** **memory** as 13,007. The cells in these array chips share
this **vertical** **memory** on a time division multiplex basis, first
between the chips and then between the cells within a...
...would typically be connected to the horizontal memory and the Y bus is
typically connected to the **vertical** **memory** . Connections between
adjacent chips are made by the left/right connections as 13,013 and the
right...

28/5,K/23   (Item 23 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00227822
**Cellular array processing apparatus employing multiple state logic for
    coupling to data buses.**
**Zellularer Feldprozessor mit Mehrzustandslogik zur Verbindung mit dem
    Datenbus.**
**Processeur en reseau cellulaire utilisant une logique a plusieurs etats
    pour le couplage vers des bus de donnees.**
PATENT ASSIGNEE:
  International Standard Electric Corporation, (202420), 320 Park Avenue,
    New York New York 10022, (US), (applicant designated states: FR;GB)
INVENTOR:
  Morton, Steven Gregory, 39 Old Good Hill Road, Oxford, CT 06483, (US)
LEGAL REPRESENTATIVE:
  Pothet, Jean et al , c/o ITT Data Systems France S.A. Tour Maine
    Montparnasse 33, avenue du Maine, F-75755 Paris Cedex 15, (FR)
PATENT (CC, No, Kind, Date):   EP 236643   A2   870916 (Basic)
                               EP 236643   A3   890614
APPLICATION (CC, No, Date):   EP 86402739 861210;
PRIORITY (CC, No, Date): US 808315 851212
DESIGNATED STATES: FR; GB
INTERNATIONAL PATENT CLASS: **G06F-015/06** ; H03K-019/173; **G06F-001/00**
CITED PATENTS (EP A): EP 84247 A; EP 84247 A; US 4438491 A; US 4438491 A
CITED REFERENCES (EP A):
  INTERFACES IN COMPUTING, vol. 2, no. 3, August 1984, pages 249-258,
    Elsevier Sequoia, Amsterdam, NL; C. CAPADAY et al.:
    "Analogue-to-digital and digital-to-analogue 12-bit interfaces for
    direct digital control using an AIM-65 microcomputer";

ABSTRACT EP 236643 A2
  Apparatus is described to enable the use of 5 level logic comprising an
off state so that a collection of like devices may be connected on a
common bus where any one of those devices may drive the bus as well as 4
logic levels being represented by 4 voltage levels on the bus. The
voltage levels are received by a 2-bit A/D converter and are generated by
a 2-bit D/A converter that has been optimized to minimize power
dissipation. Furthermore, a means is disclosed wherein a collection of
pins may be organized in a regular structure to minimize the on-chip
interconnect wiring so that a multiplicity of external buses may be
supported, being multiplexed into a single internal common bus. In
addition, a means is disclosed wherein these pins may be dynamically
configured to form a collection of 2-level and 4-level buses to suit the
interfacing needs of the chip, wherein a trade off may be made between
the number of voltage levels and the number of buses being connected to.

ABSTRACT WORD COUNT: 176

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 870916 A2 Published application (A1with Search Report
                             ;A2without Search Report)
 Change: 890607 A2 Obligatory supplementary classification
                             (change)
 Search Report: 890614 A3 Separate publication of the European or
                             International search report
 Withdrawal: 900822 A2 Date on which the European patent application
                             was deemed to be withdrawn: 891215
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
     CLAIMS A   (English) EPABF1   789
     SPEC A   (English) EPABF1   25381
Total word count - document A   26170
Total word count - document B   0
Total word count - documents A + B   26170

INTERNATIONAL PATENT CLASS: **G06F-015/06 ...**
... G06F-001/00

...SPECIFICATION operation of the Vector IF/ELSE instruction is explained
in Figure 86.
    Figure 84 shows a cellular **processor   array** with controller. The key
elements of the **processor   array** are the 4 by 4 matrix of array chips,
numbers 13,000 to 13,006 which shows...

...The array chips in a column are connected by a vertical bus as 13,011 to
a **vertical   memory** as 13,007. The cells in these array chips share
this **vertical   memory** on a time division multiplex basis, first
between the chips and then between the cells within a...

...would typically be connected to the horizontal memory and the Y bus is
typically connected to the **vertical   memory** . Connections between
adjacent chips are made by the left/right connections as 13,013 and the
right...

 28/5,K/24   (Item 24 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00227821
**Cellular array processing apparatus with on-chip RAM and address generator
   apparatus.**
**Zellularer   Feldprozessor   mit   integriertem   RAM-Speicher   und
   Adressengenerator.**
**Processeur en reseau cellulaire comportant une memoire RAM integree et un
   generateur d'adresses.**
PATENT ASSIGNEE:
  ITT INDUSTRIES INC., (209950), 320 Park Avenue, New York, NY 10022, (US),
     (applicant designated states: DE;FR;GB;IT;NL;SE)
INVENTOR:
  Morton, Steven Gregory, 39 Old Good Hill Road, Oxford, CT 06483, (US)
LEGAL REPRESENTATIVE:
  Klunker . Schmitt-Nilson . Hirsch (101001), Winzererstrasse 106, D-8000
     Munchen 40, (DE)
PATENT (CC, No, Kind, Date): EP 232641 A2 870819 (Basic)

EP 232641 A3 890614
APPLICATION (CC, No, Date):   EP 86402738 861210;
PRIORITY (CC, No, Date): US 808314 851212
DESIGNATED STATES: DE; FR; GB; IT; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-015/06**
CITED PATENTS (EP A): EP 226103 A
CITED REFERENCES (EP A):
  IEEE MICRO, December 1985, pages 37-49, IEEE; S.G. MORTON; "ITT CAP -
    toward a personal supercomputer"
  IEEE TRANSACTIONS ON COMPUTERS, vol. C-27, no. 2, February 1978, pages
    144-156, IEEE; R.P. ROESSER; "Two-dimensional microprocessor pipelines
    for image processing";

ABSTRACT EP 232641 A2
    In a cellular array processor at least two of the plurality of
processors in a row cooperate together as an address generator so that
large amounts of memory external to the array chip may be addressed and
in addition so that an address may be generated onboard for use by the
DRAM memory associated with each processor. Based on this structure, a
memory with an internal organization that is 256-bits wide may be
connected to 16 16-bit processors which would require 256 bits of data.
In so doing, a vast number of pins are saved, that is 256 bits of data
out of the memory and 256 bits of data into the processing cells by
combining the processing cells and memory on the same chip. It is
significant that exactly one design of a processing cell may provide both
a data processing element and an address processing element. In this way,
these cells are interchangeable to maximize the yield and reliability of
the device. A single address from the address generator addresses the
entire onboard DRAM so as to use the number of address generators
required and to reduce the amount of address decode logic required as
well as minimizing power dissipation in the DRAM portion of the chip.
ABSTRACT WORD COUNT: 213

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 870819 A2 Published application (A1with Search Report
                             ;A2without Search Report)
 Change: 871021 A2 Representative (change)
 Change: 890322 A2 Representative (change)
 Change: 890503 A2 Representative (change)
 Search Report: 890614 A3 Separate publication of the European or
                             International search report
 Withdrawal: 900808 A2 Date on which the European patent application
                             was deemed to be withdrawn: 891215
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
     CLAIMS A (English) EPABF1   471
     SPEC A   (English) EPABF1   25379
Total word count - document A   25850
Total word count - document B   0
Total word count - documents A + B   25850

INTERNATIONAL PATENT CLASS: **G06F-015/06**

- ...SPECIFICATION operation of the Vector IF/ELSE instruction is explained
    in Figure 86.
    Figure 84 shows a cellular **processor   array** with controller. The key
  elements of this **processor   array** are the 4 by 4 matrix of array
  chips, numbers 13,000 to 13,006 which shows...

...The array chips in a column are connected by a vertical bus as 13,011 to

a **vertical memory** as 13,007. The cells in these array chips share
this **vertical memory** on a time division multiplex basis, first
between the chips and then between the cells within a...

...would typically be connected to the horizontal memory and the Y bus is
typically connected to the **vertical memory** . Connections between
adjacent chips are made by the left/right connections as 13,013 and the
right...

28/5,K/25   (Item 25 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2002 European Patent Office. All rts. reserv.

00227820
**Cellular array processing apparatus employing dynamically reconfigurable
vector bit slices.**
**Zellularer   Feldprozessor   mit   dynamisch   rekonfigurierbaren
Vektorbitscheiben.**
**Processeur en reseau cellulaire utilisant des tranches de vecteurs
reconfigurables dynamiquement.**
PATENT ASSIGNEE:
  ITT INDUSTRIES INC., (209950), 320 Park Avenue, New York, NY 10022, (US),
    (applicant designated states: DE;FR;GB;IT;NL;SE)
INVENTOR:
  Morton, Steven Gregory, 39 Old Good Hill Road, Oxford, CT 06483, (US)
LEGAL REPRESENTATIVE:
  Klunker . Schmitt-Nilson . Hirsch (101001), Winzererstrasse 106, D-8000
    Munchen 40, (DE)
PATENT (CC, No, Kind, Date): EP 234146 A2   870902 (Basic)
                              EP 234146 A3   890705
APPLICATION (CC, No, Date):   EP 86402737 861210;
PRIORITY (CC, No, Date): US 808392 851212
DESIGNATED STATES: DE; FR; GB; IT; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-015/06**
CITED PATENTS (EP A): US 4304002 A; US 4314349 A
CITED REFERENCES (EP A):
  CONFERENCE PROCEEDINGS, THE 10TH ANNUAL INTERNATIONAL SYMPOSIUM ON
    COMPUTER ARCHITECTURE, Stockholm, 1983, pages 379-386, IEEE, New York,
    US; G. GAILLAT: "The design of a parallel processor for image
    processing on-board satellites: an application oriented approach"
  Idem
  IEEE MICRO, December 1985, pages 37-49, IEEE, New York, US; S.G. MORTON
    et al.: "ITT CAP - toward a personal supercomputer"
  ELECTRONICS, vol. 58, no. 49, 9th December 1985, pages 40-41, New York,
    US; "ITT takes pared-down approach to wafer-scale ICs"
  1986 PROCEEDINGS FALL JOINT COMPUTER CONFERENCE, Dallas, Texas, 2nd-6th
    November 1986, pages 277-286, IEEE, New York, US; S.G. MORTON: "A fault
    tolerant, BIT-parallel, cellular array processor";

ABSTRACT EP 234146 A2
    There is described a cellular array including a matrixed array of
processing elements. The processing elements are controlled by software
to overcome manufacturing defects to cooperate together to form words of
varying size and to replace cells that become defective during the
lifetime of the processor, thereby prolonging its life. These cells
communicate with memory external to the chip via a time divisioned
multiplex bus. The bus is 32-bits wide and each cell is connected to both
the upper half and lower half of the bus. According to the configuration
bits that are loaded into a cell, the cell will communicate over the top
half or the bottom half of the bus according to the significance of the

bits placed in the cells and may form words between 16-bits and 246-bits in the case where 20 such cells are implemented on a single chip with four of the cells being deemed to be spare parts. For simplicity, typical word sizes would be 2n x 16 bits although in principle any multiple of 16-bits may be obtained. Each cell contains a 16-bit multiport RAM which provides general purpose registers for use by the programmer as well as systems registers such as the processor status word and multiplier quotient register as well as a full-function arithmetic logic unit, as well as path logic to connect the cells together and control means to control the flow of information through the path logic according to the instruction being executed. This chip may be considered to implement a vector bit slice part in that a collection of 16-bit slice elements is contained on a single chip. These cells operate in a single instruction multiple data format as 16 16-bit processors, 8 32-bit processors, and so on, operating on the same instruction stream simultaneously but with different data streams.

ABSTRACT WORD COUNT: 307
LEGAL STATUS (Type, Pub Date, Kind, Text):
Application:	870902	A2	Published application (A1with Search Report ;A2without Search Report)
Change:	871021	A2	Representative (change)
Change:	890322	A2	Representative (change)
Change:	890503	A2	Representative (change)
Change:	890531	A2	Representative (change)
Search Report:	890705	A3	Separate publication of the European or International search report
Withdrawal:	900905	A2	Date on which the European patent application was deemed to be withdrawn: 900106

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	660
SPEC A	(English)	EPABF1	25391
Total word count - document A			26051
Total word count - document B			0
Total word count - documents A + B			26051

INTERNATIONAL PATENT CLASS: **G06F-015/06**
...SPECIFICATION operation of the Vector IF/ELSE instruction is explained in Figure 86.
   Figure 84 shows a cellular **processor   array** with controller. The key elements of this **processor   array** are the 4 by 4 matrix of array chips, numbers 13,000 to 13,006 which shows...

...The array chips in a column are connected by a vertical bus as 13,011 to a **vertical   memory** as 13,007. The cells in these array chips share this **vertical   memory** on a time division multiplex basis, first between the chips and then between the cells within a...

...would typically be connected to the horizontal memory and the Y bus is typically connected to the **vertical   memory** . Connections between adjacent chips are made by the left/right connections as 13,013 and the right...

28/5,K/26   (Item 26 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00917520
A METHOD FOR DELIVERING DATA OR CODE SEGMENTS TO A LOCAL COMPUTER INA

DISTRIBUTED COMPUTER NETWORK
PROCEDE PERMETTANT D'ACHEMINER DES DONNES OU DES SEGMENTS DE CODE VERS UN ORDINATEUR LOCAL DANS UN RESEAU INFORMATIQUE PARTAGE
Patent Applicant/Inventor:
  PALUMBO Fabio, Via Satolli, 45, I-00100 Roma, IT, IT (Residence), IT
    (Nationality)
  IANNICCA Marcovalerio, Via Sistina, 134, I-00100 Roma, IT, IT (Residence)
    , IT (Nationality)
Legal Representative:
  MARIETTI Giuseppe (agent), Marietti E Gislon S.r.l., Via Larga, 16,
    I-20122 Milano, IT,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200250711 A1 20020627 (WO 0250711)
  Application: WO 2000IT516 20001213 (PCT/WO IT0000516)
  Priority Application: WO 2000IT516 20001213
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
  DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
  LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
  SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **G06F-017/30**
Publication Language: English
Filing Language: Italian
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 5777

English Abstract
  The invention relates to a method for supplying data and/or code segments
  to a local computer, in a distributed computer network, during loading of
  a first page of information present on a remote computer belonging to
  said network and requested by said local computer, said first page
  including a plurality of sequential commands for a read/execute program
  resident on said local computer, comprising the steps of: reading, by
  said read/execute program, of a linking command present on said first
  page being loaded, said command not coinciding with the last information
  contained in the first page; execution of said linking command by the
  read/execute program, said command causing momentary interruption of
  loading of the first page and start of loading of an executable object
  external to the first page; execution of said external object containing
  the data and/or the code segments to be supplied: during the step of
  execution of said object, simultaneous loading of the subsequent
  command/commands or information of said first page.

French Abstract
  L'invention porte sur un procede permettant de fournir des donnees et/ou
  des segments de code a un ordinateur local dans un reseau informatique
  partage pendant le chargement d'une premiere page d'information se
  trouvant sur un ordinateur a distance faisant partie dudit reseau et
  demandee par ledit ordinateur local. Cette premiere page contient une
  pluralite de commandes sequentielles pour un programme de
  lecture/execution residant sur ledit ordinateur local. Le procede de
  cette invention comprend les etapes suivantes: la lecture effectuee par
  le programme de lecture/execution d'une commande de liaison presente sur
  ladite premiere page en cours de chargement, ladite commande ne
  coincidant pas avec la derniere information contenue dans la premiere
  page. L'execution de ladite commande de liaison assuree par le programme

de lecture/execution, ladite commande provoquant une interruption
momentanee du chargement de la premiere page et le debut du chargement
d'un objet executable non compris dans la premiere page; l'execution
dudit objet externe contenant les donnees et/ou les segments de code a
fournir; et le chargement simultane pendant l'execution dudit objet, de
la commande/commandes posterieure(s) ou l'information de ladite premiere
page.

Legal Status (Type, Date, Text)
Publication   20020627 A1 With international search report.

Main International Patent Class: **G06F-017/30**
Fulltext Availability:
  Claims

Claim
... and to the loading/execution of the new
  page in window 9. Table I further comprises a **column** regarding
  the display on the screen of the local computer 202.
  As far as the loading of...

...for loading the requested page.
  EXAMPLE
  In a local computer connected to Internet by means of a **normal**
  telephone line with a 38,000-KbPS modem there is loaded a first
  page in HTML format...

 28/5,K/27   (Item 27 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00885021   **Image available**
**METHOD AND APPARATUS FOR CONNECTING A MASSIVELY PARALLEL PROCESSOR ARRAY TO
   A MEMORY ARRAY IN A BIT SERIAL MANNER**
**PROCEDE ET APPAREIL DE CONNEXION DU RESEAU D'UN ORDINATEUR MASSIVEMENT
   PARALLELE A UN RESEAU DE MEMOIRE EN SERIE PAR BIT**
Patent Applicant/Assignee:
  MICRON TECHNOLOGY INC, 8000 S. Federal Way, Boise, ID 83707-0006, US, US
    (Residence), US (Nationality)
Inventor(s):
  KIRSCH Graham, 2 Ringshall Gardens, Bramley, Tadley, Hants RG26 5BW, GB,
Legal Representative:
  GREGORY Donald A (agent), Dickstein, Shapiro Morin & Oshinsky LLP, 2101 L
    Street NW, Washington, DC 20037-1526, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200219129 A2 20020307 (WO 0219129)
  Application: WO 2001US27047 20010831 (PCT/WO US0127047)
  Priority Application: US 2000652003 20000831
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
  CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP
  KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU
  SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **G06F-015/16**
Publication Language: English
Filing Language: English
Fulltext Availability:

Detailed Description
Claims
Fulltext Word Count: 10308

English Abstract
A method and apparatus for connecting the processor array of an MPP array
to a memory such that data conversion by software is not necessary, and
the data can be directly stored in either a normal mode or vertical mode
in the memory is disclosed. A connection circuit is provided in which
multiple PEs share their connections to multiple data bits in the memory
array. Each PE is associated with a plurality of memory buffer registers,
which stores data read from (or to be written to) one or two memory data
bits. In horizontal (normal) mode connection the memory bits are selected
so that all the bits of a given byte are stored in the same PE, i.e.,
each set of buffer registers associated with a respective PE contains one
byte as seen by an external device. In vertical (bit serial) mode, each
set of buffer registers contains the successive bits at successive
locations in the memory corresponding to that PEs position in the memory
word. The selection is achieved utilizing a multiplexer on the input to
the register and a pair of tri-state drivers which drive each data line.

French Abstract
L'invention concerne un procede et un appareil de connexion du reseau
d'un ordinateur massivement parallele (MPP) a une memoire sans necessite
de convertir les donnees a l'aide d'un logiciel, celles-ci pouvant etre
directement stockees dans la memoire soit en mode normal, soit en mode
vertical. Un circuit de connexion comprend de multiples elements de
traitement partageant leurs connexions a de multiples bits de donnees du
reseau de memoire. Chaque element de traitement est associe a plusieurs
registres tampons de memoire de stockage des donnees lues dans (ou
destinees a etre ecrites dans) un ou deux bits de donnees de memoire.
Dans une connexion en mode horizontal (normal), les bits de memoire sont
selectionnes de maniere que tous les bits d'un octet donne soient stockes
dans le meme element de traitement, c'est-a-dire que chaque ensemble de
registres tampons associes a un element de traitement correspondant
contient un octet tel que visualise par un dispositif externe. En mode
vertical (en serie), chaque ensemble de registres tampons contient les
bits successifs a des emplacements successifs de la memoire correspondant
a la position de l'element de traitement dans le mot memoire. La
selection s'effectue a l'aide d'un multiplexeur sur l'entree du registre
et une paire de pilotes a trois etats commandant chaque ligne de donnees.

Main International Patent Class: **G06F-015/16**
Fulltext Availability:
  Detailed Description

Detailed Description
... are simple, it is possible to clock them fastiand without resorting to
  deep pipelines.

  In one exemplary **massively** parallel **processor   array** , each **PE** 16
  in the
  PE array 14 uses only a single pin to connect to the memory 12. Thus, a
  one bit...

...value are stored at successive locations in the memory 12. This storage
format is referred to as " **vertical** " **storage** . Thus data read from and
written to each **PE** will be read ...successive locations in the memory
12 as illustrated in Fig. 4. Thus, in Fig. 4, if each **PE** 16a - 16n in a
row 22 of **PE** array 14 is an eight bit **PE** ., i.e., it operates on eight
bits of data at a time,) the data in the memory will be stored in eight
successive vertical locations as illustrated. As
noted above) each **PE** is connected to memory 12 by a one bit wide data
connection 24. Thus, data from **PE** 16c will be stored in a byte sized
area 20 of memory 12 in successive locations in...

...storage of data bit serially has a number of benefits. First, die number
of data wires per **PE** 16 to the memory 12 is kept to a minimum. Second,
it allows for variable precision arithmetic...

...and processed efficiently. Third, in some cases, the
difference in speed of the memory access versus the **PE** cycle time can
be
matched by serializing the data access.
There are some drawbacks, however, with storing...read from a
memory to a PE and written to the memory from the PE via a **single bit**
connection in either a **vertical** or **horizontal mode** .

The use of a single register 52, such as for example 52a-52h, for each
circuit 40a...

 28/5,K/28   (Item 28 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00805565   **Image available**
DISPLAY SYSTEM
SYSTEME D'AFFICHAGE
Patent Applicant/Assignee:
  TELEFONAKTIEBOLAGET LM ERICSSON (publ), S-126 25 Stockholm, SE, SE
    (Residence), SE (Nationality)
Inventor(s):
  LUTNAES Sturla, Ullerakersvagen 64, S-746 43 Uppsala, SE,
Legal Representative:
  HEDBERG Ake (et al) (agent), Aros Patent AB, P.O. Box 1544, S-751 45
    Uppsala, SE,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200139167 A1 20010531 (WO 0139167)
  Application: WO 2000SE2179 20001108 (PCT/WO SE0002179)
  Priority Application: SE 994271 19991125
Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY
  BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK
  (utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB
  GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK
  LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK
  SK (utility model) SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G09G-003/36
International Patent Class: **G06F-001/32**
Publication Language: English
Filing Language: English
Fulltext Availability:

Detailed Description
Claims
Fulltext Word Count: 4640

English Abstract
According to the present invention, in an electronics device having a
display unit (11), the display unit (11) comprises according to the
present invention at least two interfaces (38, 39), controlled by one
display control unit (30, 31) each. The electronics device comprises
further an arbitrator (42), resolving any access conflicts between the
interfaces (30, 31). The arbitrator (42) can be implemented as a
switching means in the display unit or as a software communication
between the display control units. The interfaces (30; 31) preferably
control mutually overlapping areas (40, 41) of the display unit (11). One
of the interfaces (39) may be slow, and accessed e.g. by a serial
connection, being responsible for the information display during stand-by
or inactivity periods, when only limited information display is needed.
During such periods, the display control device (31) for the other
interface (38) and associated circuitry are preferably turned off. The
other interface (38) is preferably of a fast type, accessed by e.g. a
parallel connection, being responsible for a full utilization of the
display unit (11).

French Abstract
Selon l'invention, dans un dispositif electronique comprenant une unite
d'affichage (11), cette unite d'affichage (11) comprend au moins deux
interfaces (38, 39), commandees chacune par une unite de commande
d'affichage (30, 31). Ce dispositif electronique comprend egalement un
arbitre (42) destine a resoudre les conflits d'acces entre les interfaces
(30, 31). Cet arbitre (42) peut etre mis en oeuvre en tant que dispositif
de commutation dans l'unite d'affichage ou en tant que communication de
logiciel entre les unites de commande d'affichage. De preference, ces
interfaces (30; 31) commandent des zones (40, 41) de l'unite d'affichage
(11) qui se chevauchent. Une des interfaces (39), qui peut etre lente et
connectee par exemple, au moyen d'un branchement en serie, est
responsable de l'affichage d'informations pendant des periodes d'attente
ou d'inactivite, lorsque seules des informations limitees sont requises.
Pendant ces periodes, le dispositif de commande d'affichage (31) pour
l'autre interface (38) et ses circuits associes sont, de preference,
eteints. L'autre interface (38), qui est de preference d'un type rapide
et connectee, par exemple, au moyen d'un branchement en parallele, est
responsable d'une utilisation complete de l'unite d'affichage (11).

Detailed Description
... unit according to the present invention. A LCD unit 1 1 comprises a
  LCD area 53.

A **row** driver 82 and a **column** driver 81 control the LCD area 53. The
column driver is comprised in a driver control unit 80. A first
interface 39 and a second interface...
...this embodiment constituted as a serial interface,
  having a serial data input/output connection 83 and a **serial** clock
  connection 84. The second interface 38 is in this embodiment
  constituted as

a parallel interface, having a 16 bit **bi - directional** data bus 85, a command/data select signal connection 86, a read strobe connection 87 and a...

28/5,K/29   (Item 29 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00784185   **Image available**
A SYSTEM AND METHOD FOR STREAM-BASED COMMUNICATION IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT
SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION FOURNISSANT UN SYSTEME DE COMMUNICATION EN CONTINU DANS UN ENVIRONNEMENT DE CONFIGURATIONS DE SERVICES DE COMMUNICATION
Patent Applicant/Assignee:
  ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)
Inventor(s):
  BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 , US,
Legal Representative:
  HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,   .
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200117195 A2-A3 20010308 (WO 0117195)
  Application: WO 2000US24125 20000831 (PCT/WO US0024125)
  Priority Application: US 99386717 19990831
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
  DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
  LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
  SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04L-029/06
International Patent Class: **G06F-017/22** ; H04L-029/12
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 150532

English Abstract
  A system, method, and article of manufacture are disclosed for providing a stream-based communication system. A shared format is defined on interface code for a sending system and a receiving system. A message to be sent from the sending system to the receiving system is translated based on the shared format. Once translated, the message is then sent from the sending system and received by the receiving system. Once the message is received by the receiving system, the message is then translated based on the shared format.

French Abstract
  L'invention concerne un systeme, un procede et un article de production fournissant un systeme de communication en continu. Un format partage est defini selon un code d'interface pour un systeme emetteur et un systeme recepteur. Un message devant etre envoye par le systeme emetteur est traduit sur la base du format partage. Une fois traduit, le message est

envoye du systeme emetteur et recu par le systeme recepteur. Le message
recu par le systeme recepteur est ensuite traduit sur la base du format
partage.

Legal Status (Type, Date, Text)
Publication   20010308 A2 Without international search report and to be
                         republished upon receipt of that report.
Examination   20010907 Request for preliminary examination prior to end of
                         19th month from priority date
Search Rpt   20011115 Late publication of international search report
Republication 20011115 A3 With international search report.

International Patent Class: **G06F-017/22** ...
Fulltext Availability:
  Detailed Description

Detailed Description
... to utilize each others capabilities or functions. This is generally
   done by assuming a common component object **model** on which to build the
   architecture. It is worthwhile to differentiate between an object and a
   class...applications
   Digital Equipment Corp.'s DEC/EDI
   Sterling Commerce's GENTRAN
   EDI value-added networks (VANs) - VANs **link** EDI trading partners and
   transmit EDI
   messages through a central electronic clearinghouse
   IBM Global Services' Advantis
   GE...

 28/5,K/30   (Item 30 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00784131
A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A MULTI-OBJECT FETCH
    COMPONENT IN AN INFORMATION SERVICES PATTERNS ENVIRONMENT
SYSTEME, PROCEDE ET ARTICLE MANUFACTURE POUR COMPOSANT DE RECUPERATION
    MULTI-OBJET DANS UN ENVIRONNEMENT CARACTERISE PAR DES SERVICES
    D'INFORMATIONS
Patent Applicant/Assignee:
  ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US
    (Residence), US (Nationality)
Inventor(s):
  BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918
    , US,
Legal Representative:
  HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037,
    Palo Alto, CA 94303-0746, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200116723 A2 20010308 (WO 0116723)
  Application: WO 2000US24083 20000831 (PCT/WO US0024083)
  Priority Application: US 99386238 19990831
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM
  EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU
  LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
  TZ UA UG UZ VN YU ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-009/44**
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 150940

English Abstract
 ·A system, method, and article of manufacture are provided for retrieving
 muliple business objects across a network in one access operation. A
 business object and a plurality of remaining objects are provided on a
 persistent store. Upon receiving a request for the business object, it is
 established which of the remaining objects are related to the business
 object. The related objects and the business object are retrieved from
 the persistant store in one operation and it is determined how the
 retrieved related objects relate to the business object and each other. A
 graph of relationships of the business and related objects is
 instantiated in memory.

French Abstract
 La presente invention concerne un systeme, un procede et un article
 manufacture destine a la recuperation de plusieurs objets d'affaires dans
 un reseau en une operation d'acces. A cet effet, on dispose dans une
 memoire permanente d'un objet d'affaire et d'une pluralite d'objets
 restants. Des la reception d'une requete se rapportant a un objet
 d'affaires, on recherche deux des objets restants qui sont en relations
 avec l'objet d'affaires. Une seule operation permet ainsi de recuperer
 dans la memoire permanente ces objets ainsi que l'objet d'affaires. Il ne
 reste plus qu'a determiner les relations existant d'une part entre les
 objets consideres et d'autre part entre ces objets et l'objet d'affaires.
 Une instanciation d'un graphique des relations entre les objets et
 l'objet d'affaire est conservee en memoire.

Legal Status (Type, Date, Text)
Publication   20010308 A2 Without international search report and to be
                          republished upon receipt of that report.
Examination   20010809 Request for preliminary examination prior to end of
                          19th month from priority date

Main International Patent Class: **G06F-009/44**
Fulltext Availability:
  Detailed Description

Detailed Description
... interface devices such as a touch screen (not shown) to the bus 112,
  communication adapter 134 for **connecting** the workstation to a
  communication network (e.g., a data processing network) and a display
  adapter 136...the Unix client/server RDBMS market, Oracle is available
  for a wide variety of hardware platforms including **MPP** machines.
  Oracles market position and breadth of platforin support has made it the
  RDBMS of choice for...of developers to do things consistently and to
  benefit from previously captured, reusable knowledge.

  capital.

  Business Components **model** the business. It sounds straightforward, but
  even with experience it's a challenge to identify the right...

28/5,K/31   (Item 31 from file: 349)

Search report

DIALOG(R)File 349:PCT FULLTEXT
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00565053   **Image available**
WALLET FOR PERSONAL INFORMATION DEVICE
PORTEFEUILLE POUR DISPOSITIF ELECTRONIQUE PERSONNEL
Patent Applicant/Assignee:
  XIRCOM INC,
  KAVANAUGH Paul K,
  TODOROVICH Mark M,
  GRIEB Robert L,
Inventor(s):
  KAVANAUGH Paul K,
  TODOROVICH Mark M,
  GRIEB Robert L,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200028426 A1 20000518 (WO 0028426)
  Application: WO 99US26626 19991111 (PCT/WO US9926626)
  Priority Application: US 98189572 19981111
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK
  DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ
  TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM
  AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL
  PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: **G06F-013/10**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 11121

English Abstract
   A wallet (70) for a personal information device (10) in a form of a
PCMCIA card such as a PCMCIA-card electronic organizer. The wallet (70)
includes an input device (80) separated from the input device (14) of the
personal information device (10) and two halves (72, 74) that may be
folded together in a wallet-like fashion. One (72) of the halves
generally includes a touch panel input (80) to allow a user to enter
information, commands instructions, etc., thereto. A personal information
device (10) is mounted to the second half (74) of the wallet (70). When
mounted, the wallet (70) supplies via an electrical connection (16) or
induction communication (84) the user-supplied information entered into
the touch panel input (80) to the personal information device (10). The
wallet display (80) may be powered by personal information device (10)
via the electrical connection or self-powered. Upon coupling the
personnal information device (10) to the wallet (70), personal
information device (10) may supply a wake signal to wake up or
automatically turn on the input device (80) of the wallet (70). The
wallet (70) may further include an input/output connector (82) for
coupling via a cable (90) the wallet (70) to an external device such as
another wallet, a personal computer, etc.

French Abstract
   L'invention se rapporte a un portefeuille (70) concu pour un dispositif
electronique personnel (10) se presentant sous la forme d'une carte
PCMCIA, tel qu'un agenda electronique a carte PCMCIA. Ce portefeuille
(70) comporte un organe d'entree (80) distinct de l'organe d'entree (14)
du dispositif electronique personnel (10) et presente deux moities (72,
74) qui peuvent se refermer l'une sur l'autre a la maniere d'un
portefeuille. L'une (72) de ces moities comporte generalement un organe

d'entree de type panneau a effleurement (80) qui permettent a un utilisateur d'y entrer des informations, des commandes, des instructions, etc. Lorsqu'il est assemble, ce·portefeuille (70) transmet au dispositif electronique personnel (10) les informations fournies par l'utilisateur et entrees au moyen du panneau a effleurement (80), par l'intermediaire d'une connexion electrique (16) ou d'un organe de communication par induction (84). L'ecran (80) du portefeuille peut etre alimente par le dispositif electronique personnel (10) par l'intermediaire d'une connexion electrique ou etre auto-alimente. Lorsqu'il est couple au portefeuille (70), le dispositif electronique personnel (10) peut delivrer un signal de reveil permettant d'activer ou de mettre automatiquement sous tension l'organe d'entree (80) du portefeuille (70). Ce dernier peut egalement comporter un connecteur d'entree/sortie (82) destine au couplage, par l'intermediaire d'un cable (90), du portefeuille (70) a un dispositif externe tel qu'un autre portefeuille, un ordinateur personnel, etc.

Main International Patent Class: **G06F-013/10**
Fulltext Availability:
  Claims

Claim
... to an integrated circuit mounted on the reverse side of the touchpad, the first (upper) layer containing **vertical** electrode strips and the second (lower) layer containing **horizontal** electrical strips. Mutual capacitance from each of the **horizontal** electrodes to each of the **vertical** electrodes, and which is modified by the presence of a human finger, is measured by the touchpad...
...embodiments previously discussed. Referring back to Fig. 9, and as previously mentioned, wallet 70 may include a **serial   connector** 82 to which a cable 90 may be coupled for the purpose of interfacing personal information device...

...0, when inserted into wallet 70, to a host computer. Cable 90 may include attached thereto a **serial   connector** or other type of connector, (not shown) that may be **connected** to the **serial** or other port of the host computer. Cable 90 may even be attached to a PCMCIA card ...

...that is not reflected in the host computer. In accordance with another embodiment of the present invention, **serial   connector** 82 of wallet 70 may be coupled via cable 90 (or other suitable cable) to any one...a different shape and size (e.g., a three-fold type wallet, a wallet with folds along **perpendicular** axes, etc.). Therefore, it is intended that the appended claims be interpreted as including the embodiments described ...

 28/5,K/32   (Item 32 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00552002   **Image available**
DESIGN TOOL
OUTIL DE CONCEPTION
Patent Applicant/Assignee:
  ASKO INC,
Inventor(s):
  ZELT Albert R III,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200015375 A1 20000323 (WO 0015375)

Application: WO 99US20763 19990910   (PCT/WO US9920763)
Priority Application: US 98150523 19980910
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK
  DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
  TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ
  MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ
  CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: B23D-035/00
International Patent Class: **G06F-017/50**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 11300

English Abstract
  A design tool for predictively indicating, in metal slitting, expected
  edge conditions of slit metal. Also contemplated is a corresponding
  method. Further contemplated is a design tool and method for providing,
  in metal slitting, a predictive assessment of at least one condition
  relating to at least one of: knife edge and slit metal edge.

French Abstract
  L'invention concerne un outil de conception destine a indiquer a
  l'avance, au cours d'operations de refendage de metaux, des etats
  attendus relatifs aux bords du metal refendu. L'invention concerne
  egalement le procede correspondant. L'invention concerne enfin un outil
  et un procede de conception permettant, au cours des operations de
  refendage des metaux, d'evaluer a l'avance au moins un etat relatif soit
  a l'arete du couteau soit au bord du metal refendu.

International Patent Class: **G06F-017/50**
Fulltext Availability:
  Claims

Claim
... 5
  Slitter Knive
  Top Arbor
  Shoulder Arbor Lockir
  C3
  Female e
  CA
  C
  to
  U) acer
  I **Vertical**
  M VTAf 2 1 ------- @j ---- - --------------
  M Clearance
  :C:
  M or Overlap Hofizont
  M
  Clearan
  pace
  r
   M
  Female

  Bo Arbor A ckj
  Shoulder

FIGO
(Prior Art)
c **Horizontal** tep
Clearance
Lower Knife
Knih
FIG= 2A
(Prior Art)
Step @
At instant of "parring"
Knife
Ni
Knife...

...Knife
Break
&t@@Break
Knife
FIGm 2C
(Prior Art)
SUBSTITUTE SHEET (RULE 26)
Slitter Knives
Edge View
(**Vertical**
Clearance)
C C
C
(**Horizontal**
Clearance)
H
Li
Case 2 Case 3
Case 1 **Vertical   Vertical**
 Vertical Clearance or Overlap
Clearance Overlap
FIGm 3
(Prior Art)
SUBSTITUTE SHEET (RULE 26)
Slitter Knives
Top Arbor
Shoulder
Arbor Nut
Fema Male Female
Stripper Stripper Stripper
Ring Ring Ring
C
C
Male **Horizontal**
Stripper Clearance
Ring
Bottom or Spacer
Shoulder
FIG 4
(Prior Art)
SUBSTITUTE SHEET (RULE 26)
Des@qn...

...4
f YFF F
OK I Refresbi
FIGm 6 40

56

2002 2004
Dull Gray Fracture Zone Dull
 Straight   Line Between Shiny Jagg,
Penetration Zone and Fracture Penetr;
C
M
Cn Shiny Penetration Zone is Ev
M...

...0.000 2 0.5 0.003 3857.813 IS-1
 M
 Wic
 F6A
 Wei
 M
 rij
 Pe
 E
Setup: Head I-Standard Setup) 8/13/9B
FIGO 10
E 1.25 'CO
E
1...

 28/5,K/33   (Item 33 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2002 WIPO/Univentio. All rts. reserv.

00522061   **Image available**
**PATTERN GENERATION AND SHIFT PLANE OPERATIONS FOR A MESH CONNECTED COMPUTER
GENERATION DE MOTIF ET OPERATIONS DE DEPLACEMENT DE PLAN POUR ORDINATEUR A
    ARCHITECTURE EN RESEAU**
Patent Applicant/Assignee:
  LOCKHEED MARTIN CORPORATION,
Inventor(s):
  MEEKER Woodrow L,
  ABERCROMBIE Andrew P,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9953413 A1 19991021
  Application: WO 99US7004 19990409 (PCT/WO US9907004)
  Priority Application: US 9857469 19980409
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
  ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
  LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
  UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU
  TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
  CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: **G06F-015/80**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 13116

English Abstract
  An apparatus for processing data has a Single-Instruction-Multiple-Data
  (SIMD) architecture, and a number of features that improve performance
  and programmability. The apparatus includes a rectangular array of
  processing elements and a controller. The apparatus offers a number of
  techniques for shifting image data within the array. A first technique,

the ROLL option, simultaneously shifts image planes in **opposite directions** within the array. A second technique, the gated shift option, makes a **normal** shift of an image plane to neighboring PEs conditional, for each **PE** , upon a value stored in a mask register of each **PE** . A third technique, the carry propagate option, combines the computations from multiple PEs in order to complete an n-bit operation in fewer than n clocks by forming "supercells" within the array. The apparatus also includes a multi-bit X Pattern register and a multi-bit Y Pattern register. These registers have bit values corresponding to respective **columns** (for the X Pattern register) and rows (for the Y Pattern register) of the array. Patterns can be propagated from these registers into corresponding rows and **columns** . Further these registers can be used to receive values representing the logical OR of signals generated by individual PEs within respective rows and **columns** . Further, a number of global data registers are used to store information which can be broadcast back into the processing array.

French Abstract
   L'invention concerne un dispositif de traitement de donnees possedant une architecture a instruction unique-donnees multiples (SIMD), et plusieurs fonctions ameliorant la performance et la facilite de programmation. Ce dispositif comprend une matrice rectangulaire de processeurs elementaires et un controleur. Il offre un certain nombre de techniques permettant de deplacer des donnees images dans la matrice. Une premiere technique, l'option "ROLL", deplace simultanement les plans image dans des directions opposees a l'interieur de la matrice. Une deuxieme technique, l'option de deplacement a porte, soumet le deplacement normal du plan image dans le PE adjacent a une condition definie pour chaque PE par une valeur memorisee dans un registre de motifs propre a chaque PE. Une troisieme technique, l'option de propagation-transport, combine les calculs d'une pluralite de PE afin de realiser une operation de n-bits en moins de n impulsions d'horloge par la formation de supercellules dans la matrice. Le dispositif comprend en outre un registre de motifs X multi-bits et un registre de motifs Y multi-bits. Ces registres ont des valeurs de bit correspondant aux colonnes respectives(pour le registre de motifs x) et aux rangees respectives (pour le registre de motifs y) de la matrice. Les motifs peuvent etre propages a partir de ces registres dans des rangees et des colonnes correspondantes. En outre ces registres peuvent etre utilise pour recevoir des valeurs representant le OU logique des signaux generes par les PE individuels dans les rangees et les colonnes respectives. Plusieurs registres de donnees globaux sont en outre utilises pour memoriser l'information qui peut etre rediffusee dans la matrice de traitement.

English Abstract
   ...shifting image data within the array. A first technique, the ROLL option, simultaneously shifts image planes in **opposite   directions** within the array. A second technique, the gated shift option, makes a **normal** shift of an image plane to neighboring PEs conditional, for each **PE** , upon a value stored in a mask register of each **PE** . A third technique, the carry propagate option, combines the computations from multiple PEs in order to complete...

   ...Pattern register and a multi-bit Y Pattern register. These registers have bit values corresponding to respective **columns** (for the X Pattern register) and rows (for the Y Pattern register) of the array. Patterns

can be propagated from these registers into corresponding rows and
columns . Further these registers can be used to receive values
representing the logical OR of signals generated by individual PEs within
respective rows and **columns** . Further, a number of global data registers
are used to store information which can be broadcast back...

Detailed Description
... a rectangular PE array of whatever size is desired.

Device boundaries are invisible to the programmer for **normal** shift
operations. For example, a shift to the east propagates thirty-two EO
signals from the PEs 300 in the east-most **column** of one MCC 100 to the
thirty-two El signals of the PEs 300 in the west-most **column** of the
neighboring MCC to the east. These chip outputs are **bidirectional** , with
a single signal pin being dedicated to each boundary **PE** 300, and as
such, may impose some limitations which do not apply to the interior PEs
300 within the **PE** array 102. One limitation of the exemplary embodiment
is that the boundary PEs 300 may communicate in...

28/5,K/34   (Item 34 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00522060   **Image available**
GLOBAL INPUT/OUTPUT SUPPORT FOR A MESH CONNECTED COMPUTER
SUPPORT GLOBAL D'ENTREE/SORTIE ORDINATEUR A ARCHITECTURE EN RESEAU
Patent Applicant/Assignee:
  LOCKHEED MARTIN CORPORATION,
Inventor(s):
  ABERCROMBIE Andrew P,
  SUTHA Surachai,
  HOLSZTYNSKI Wlodzimierz,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9953412 A1 19991021
  Application: WO 99US7001 19990409   (PCT/WO US9907001)
  Priority Application: US 9857468 19980409
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
  ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
  LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
  UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU
  TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
  CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: **G06F-015/80**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 12270

English Abstract
  An apparatus for processing data has a Single-Instruction-Multiple-Data
  (SIMD) architecture, and a number of features that improve performance
  and programmability. The apparatus includes a rectangular array of
  processing elements and a controller. The apparatus offers a number of
  techniques for shifting image data within the array. A first technique,
  the ROLL option, simultaneously shifts image planes in **opposite**
  directions within the array. A second technique, the gated shift option,
  makes a **normal** shift of an image plane to neighboring PEs conditional,
  for each **PE** , upon a value stored in a pattern register of each **PE** . A
  third technique, the carry propagate option, combines the computations

from multiple PEs in order to complete an n-bit operation in fewer than n clocks by forming "supercells" within the array. The apparatus also includes a multi-bit X Pattern register and a multi-bit Y Pattern register. These registers have bit values corresponding to respective **columns** (for the X Pattern register) and rows (for the Y Pattern register) of the array. Patterns can be propagated from these registers into corresponding rows and **columns** . Further these registers can be used to receive values representing the logical OR of signals generated by individual PEs within respective rows and **columns** . Further, a number of global data registers are used to store information which can be broadcast back into the processing array.

French Abstract
    L'invention concerne un dispositif de traitement de donnees possedant une architecture a instruction unique-donnees multiples (SIMD), et plusieurs fonctions ameliorant la performance et la facilite de programmation. Ce dispositif comprend une matrice rectangulaire de processeurs elementaires et un controleur. Il offre un certain nombre de techniques permettant de deplacer des donnees images dans la matrice. Une premiere technique, l'option "ROLL", deplace simultanement les plans image dans des directions opposees a l'interieur de la matrice. Une deuxieme technique, l'option de deplacement a porte, soumet le deplacement normal du plan image dans le PE adjacent a une condition definie pour chaque PE par une valeur memorisee dans un registre de motifs propre a chaque PE. Une troisieme technique, l'option de propagation-transport, combine les calculs d'une pluralite de PE afin de realiser une operation de n-bits en moins de n impulsions d'horloge par la formation de supercellules dans la matrice. Le dispositif comprend en outre un registre de motifs X multi-bits et un registre de motifs Y multi-bits. Ces registres ont des valeurs de bit correspondant aux colonnes respectives (pour le registre de motifs x) et aux rangees respectives (pour le registre de motifs y) de la matrice. Les motifs peuvent etre propages a partir de ces registres dans des rangees et des colonnes correspondantes. En outre ces registres peuvent etre utilise pour recevoir des valeurs representant le OU logique des signaux generes par les PE individuels dans les rangees et les colonnes respectives. Plusieurs registres de donnees globaux sont en outre utilises pour memoriser l'information qui peut etre rediffusee dans la matrice de traitement.

Main International Patent Class: **G06F-015/80**
Fulltext Availability:
    Detailed Description

English Abstract
    ...shifting image data within the array. A first technique, the ROLL option, simultaneously shifts image planes in **opposite directions** within the array. A second technique, the gated shift option, makes a **normal** shift of an image plane to neighboring PEs conditional, for each **PE** , upon a value stored in a pattern register of each **PE** . A third technique, the carry propagate option, combines the computations from multiple PEs in order to complete...

    ...Pattern register and a multi-bit Y Pattern register. These registers have bit values corresponding to respective **columns** (for the X Pattern register) and rows (for the Y Pattern register) of the array. Patterns can be propagated from these registers into corresponding rows and **columns** . Further these registers can be used to receive values representing the logical OR of signals generated by individual PEs within respective rows and **columns** . Further, a number of global data registers are used to store information which can be broadcast back...

60

Detailed Description
... a rectangular PE array of whatever size is desired.

Device boundaries are invisible to the programmer for **normal** shift operations. For example, a shift to the east propagates thirty-two EO signals from the PEs 300 in the east-most **column** of one MCC 100 to the thirty-two El signals of the PEs 300 in the west-most **column** of the neighboring MCC to the east. These chip outputs are **bidirectional** , with a single signal pin being dedicated to each boundary **PE** 300, and as such, may impose some limitations which do not apply to the interior PEs 300 within the **PE** array 102. One limitation of the exemplary embodiment is that the boundary PEs 300 may communicate in...

28/5,K/35   (Item 35 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00522059   **Image available**
MESH CONNECTED COMPUTER
ORDINATEUR A ARCHITECTURE EN RESEAU MAILLE
Patent Applicant/Assignee:
  LOCKHEED MARTIN CORPORATION,
Inventor(s):
  ABERCROMBIE Andrew P,
  DUNCAN David A,
  MEEKER Woodrow L,
  SCHOOMAKER Ronald W,
  VAN DYKE-LEWIS Michele D,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9953411 A2 19991021
  Application: WO 99US4299 19990409 (PCT/WO US9904299)
  Priority Application: US 9857482 19980409
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
  ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
  LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
  UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU
  TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
  CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: **G06F-015/80**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 70382

English Abstract
  An apparatus for processing data has a Single-Instruction-Multiple-Data (SIMD) architecture, and a number of features that improve performance and programmability. The apparatus includes a rectangular array of processing elements and a controller. In one aspect, each of the processing elements includes one or more addressable storage means and other elements arranged in a pipelined architecture. The controller includes means for receiving a high level instruction, and converting each instruction into a sequence of one or more processing element microinstructions for simultaneously controlling each stage of the processing element pipeline. In doing so, the controller detects and resolves a number of resource conflicts, and automatically generates instructions for registering image operands that are skewed with respect to one another in the processing element array. In another aspect, a

programmer references images via pointers to image descriptors that
include the actual addresses of various bits of multi-bit data. Other
features facilitate and speed up the movement of data into and out of the
apparatus. "Hit" detection and histogram logic are also included.

French Abstract
    La presente invention concerne un appareil de traitement de donnees qui
presente une architecture SIMD (Single-Instruction-Multiple Data) et un
certain nombre de caracteristiques qui en ameliorent les performances et
la programmabilite. L'appareil comprend une matrice rectangulaire
d'elements de traitement et un controleur. Selon un aspect de cette
invention, chacun des elements de traitement comprend un ou plusieurs
moyens de memoire adressables agences selon une architecture pipeline. Le
controleur est dote de moyens permettant de recevoir des instructions de
haut niveau et de convertir chacune de ces instructions en une sequence
d'une ou de plusieurs micro-instructions pour element de traitement afin
de commander simultanement chaque phase du pipeline d'elements de
traitement. Grace a cette operation, le controleur detecte et resout un
certain nombre de conflits d'acces aux ressources et genere
automatiquement des instructions pour l'enregistrement d'operandes image
qui sont decalees les uns par rapport aux autres dans la matrice
d'elements de traitement. Selon un autre aspect de l'invention, un
programmeur designe, via des pointeurs, des images renvoyant a des
descripteurs d'image qui renferment les adresses effectives de divers
bits de donnees multibits. D'autres caracteristiques facilitent et
accelerent le mouvement de donnees qui entrent dans l'appareil et en
sortent. L'invention comprend egalement un moyen de detection des
existants de recherche et un histogramme logique.

Main International Patent Class: **G06F-015/80**
Fulltext Availability:
  Detailed Description

Detailed Description
... a rectangular PE array of whatever size is desired. Device boundaries
are invisible to the programmer for **normal** shift operations. For
example, a shift to the east propagates thirty-two EO signals from the
PEs...

...the west-most column of the neighboring MCC IC 101 to the east. These
chip outputs are **bi - directional** , with a single signal pin being
dedicated to each boundary **PE** 701, and as such impose some limitations
which do not apply to the interior PEs 701 within the **PE** array 103. One
limitation is that the boundary PEs 701 may communicate in one direction
only during...
...function (described below), making operation of the ROLL position
dependent. A second limitation is that shifts in **opposite   directions**
may not occur on consecutive clocks because the drivers need time to
switch. This limitation affects all...

 28/5,K/36   (Item 36 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00488455   **Image available**
METHODS AND APPARATUS FOR MANIFOLD ARRAY PROCESSING
PROCEDES ET APPAREIL DE TRAITEMENT MATRICIEL MULTIPLE
Patent Applicant/Assignee:
  BOPS INCORPORATED,
Inventor(s):

PECHANEK Gerald G,
PITSIANIS Nikos P,
BARRY Edwin F,
DRABENSTOTT Thomas L,

English Abstract
   A manifold array topology includes processing elements, nodes, memories
or the like arranged in clusters (52). Clusters are connected by cluster
switch arrangements (986A) which advantageously allow changes of
organization without physical rearrangement of processing elements. A
significant reduction in the typical number of interconnections for
preexisting arrays is also achieved. Fast, efficient and cost effective
processing and communication result with the added benefit of ready
scalability.

French Abstract
   L'invention concerne une topologie de traitement matriciel multiple
comprenant notamment des elements de traitement, des noeuds de traitement
ou des memoires de travail repartis en groupes (52). Les groupes sont
relies entre eux par des commutateurs de groupes (986A) permettant
avantageusement de changer d'organisation, sans reagencement physique des
elements de traitement. On arrive ainsi a reduire considerablement le
nombre habituel d'interconnexions pour les matrices preexistantes. Un
traitement et une communication rapides, efficaces et economiques
aboutissent a une augmentation des disponibilites de reamenagement de la
configuration.

Main International Patent Class: **G06F-015/00**
Fulltext Availability:
  Detailed Description

Detailed Description
... hypercube connectivity.

   A 5D hypercube 1900 is shown in Fig. 19, with 4 x 4 x 2 (**row** , **column** ,
plane) **PE**   numbers shown as the top label in the PEs and the 5D
hypercube numbers shown as the bottom **PE** number. For a conventional 5D
hypercube, 5- **bidirectional** or 10-unidirectional connection ports are
required in each **PE** . For the illustrated manifold array 2000
implementation shown in Fig. 20 in which a 5D hypercube is mapped onto a
4 x 4 x 2 manifold array, only 1 **bidirectional** or 2 unidirectional
ports are required in each **PE** . In addition, the standard hypercube
requires 2" or 32, PEs with a total of 5N2 (N=4) **bidirectional** buses or
ION2(N=4) unidirectional buses. The 5D hypercube manifold array 2000 of
Fig 20, requires only a total of 2N2(N=4) **bidirectional** buses or
4N2(N=4) unidirectional buses between all the clusters of PEs. Fig, 20
shows the...

28/5,K/37   (Item 37 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00465484   **Image available**
GRAPHICAL USER INTERFACE SUPPORTING METHOD AND SYSTEM FOR REMOTE ORDER GENERATION OF OFFICE FURNITURE PRODUCTS
PROCEDE ET SYSTEME DE SUPPORT D'INTERFACE UTILISATEUR GRAPHIQUE SERVANT A GENERER A DISTANCE DES INSTRUCTIONS CONCERNANT DES PRODUITS COMPLEXES DE MOBILIER DE BUREAU
Patent Applicant/Assignee:
  HAWORTH INC,
  SMITH Ward W,
  ELLIS John M,
  McNUTT Michael P,
  SCHOEPPE Renee E,
Inventor(s):
  SMITH Ward W,
  ELLIS John M,
  McNUTT Michael P,
  SCHOEPPE Renee E,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9855949 A1 19981210
  Application: WO 98US9890 19980520   (PCT/WO US9809890)
  Priority Application: US 97870681 19970606
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
  FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
  MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US
  UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE
  CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN
  ML MR NE SN TD TG
Main International Patent Class: **G06F-017/50**
International Patent Class: G06T-017/40; **G06F-017/60**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 14768

English Abstract
  A graphical user interface to a method and system for configuring office
  furniture includes interface objects for obtaining configuration criteria
  from a user; presenting the user with at least one typical configuration
  satisfying the criteria; selecting a typical configuration from the at
  least one typical configuration; modifying aspects of the selected
  typical configuration to produce a modified configuration; and checking
  the validity of the modified configuration. The configuration criteria
  include conferencing criteria; privacy criteria; power criteria;
  communications criteria; storage criteria; and area criteria. A typical
  configuration can be modified by adding, deleting, or repositioning a
  component, changing the fabric or finish or the shape or size of the
  component. A cluster configuration based on the typical configuration is
  formed. The entire product line can be changed. At any time the entire
  typical or cluster configuration can be checked for validity and priced.

French Abstract
  Interface utilisateur graphique concue pour un procede et pour un
  systeme servant a concevoir la configuration de mobilier de bureau a base
  d'objets d'interface servant a obtenir des criteres de configuration
  depuis un utilisateur. Ce procede consiste a presenter a l'utilisateur au
  moins une configuration typique repondant a ces criteres; a selectionner

une configuration typique particuliere; a modifier des aspects de la
configuration typique selectionnee afin de produire une configuration
modifiee; a verifier la validite de cette configuration modifiee. Ces
criteres de configuration comprennent des criteres de conference, des
criteres de confidentialite, des criteres de puissance, des criteres de
communication, des criteres de rangement et des criteres de zone. On peut
modifier une configuration typique par apport, suppression ou
repositionnement d'un element, par modification du tissu, de la finition,
de la forme ou de la dimension de l'element. On obtient une configuration
groupee basee sur la configuration typique. On peut modifier la totalite
de la ligne du produit. On peut a tout moment verifier la validite de la
totalite de la configuration typique et groupee et en evaluer le prix.

Main International Patent Class: **G06F-017/50**
...International Patent Class: **G06F-017/60**
Fulltext Availability:
  Detailed Description

Detailed Description
...   Ighting C416 1either adjacent panel)
  1-7T premise task light PR II"HML Prrn-til
  premise **vertical   storage** task light bracket PRIM I ???
  places canopyjlght PLC IAttaches below places canopy
  places counter top-@ask light...

...14)
  Inherits Constraint
  rod Line Properties C# Relationships L
  nent Name J@P
  !@a- 1ACCESSORY n
  places **vertical   storage** unit PLC rVa JACCESSORY.. n
  gdd @@ n/a [ACCESSORY n
  td mode-paper management bar PLC n...

 28/5,K/38   (Item 38 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00442656   **Image available**
DISTRIBUTED AGREEMENT ON PROCESSOR MEMBERSHIP IN A MULTI-PROCESSOR SYSTEM
**ACCORD DISTRIBUE CONCERNANT LE MAINTIEN DE PROCESSEURS DANS UN SYSTEME
    MULTIPROCESSEUR**
Patent Applicant/Assignee:
  TANDEM COMPUTERS INCORPORATED,
Inventor(s):
  JARDINE Robert L,
  BASAVAIAH Murali,
  KRISHNAKUMAR Karoor S,
  MURTHY Srinivasa D,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9833120 A1 19980730
  Application: WO 98US1311 19980123 (PCT/WO US9801311)
  Priority Application: US 97789257 19970128
Designated States: CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **G06F-011/00**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 15632

English Abstract
   A system to determine the group of processors that will survive
communications faults and/or timed-event failures in a multi-processor
system (100). The processors (112), each having a memory (118) and
connected to an inter-processor communication network (114), detect that
the set of processors with which they can communicate has changed. They
then choose to halt or continue operations based on minimizing the
likelihood that disconnected groups of processors will continue to
operate as independent systems on the initiation of a regroup operation
(622b). A processor is suspected of having failed when other processors
detect the absence of a periodic message from the processor (682). When
this happens, all of the processors are subjected to a series of stages
in which they repeatedly broadcast their status and connectivity to each
other (830). The suspected processor does not advance through the stages
to regroup if it has ceased operations or if its timer mechanism has
failed.

French Abstract
   La presente invention concerne un systeme permettant de determiner le
groupe de processeurs qui survivra a des defaillances de la communication
et/ou a l'echec d'evenements programmes a intervalles precis dans un
systeme multiprocesseur (100). Les processeurs (112) disposent chacun
d'une memoire (118), et ils sont connectes au moyen d'un reseau (114) de
communication inter-processeurs. Les processeurs detectent que l'ensemble
de processeurs avec lesquels ils peuvent communiquer a change. Ils
choisissent alors d'arreter ou de continuer leurs operations de maniere a
minimiser la probabilite que les groupes de processeurs deconnectes
continuent a fonctionner de facon independante. Lors du demarrage d'une
operation de regroupement (622b). Un processeur est soupconne de souffrir
d'une panne lorsque les autres processeurs detectent l'absence d'un
message periodique devant etre transmis par ledit processeur (682).
Lorsque cette situation se presente, tous les processeurs doivent passer
par une serie d'etapes au cours desquelles ils se communiquent les uns
aux autres a plusieurs reprises leur statut et leur connectivite (830).
Le processeur soupconne ne peut pas avancer d'une etape a l'autre s'il a
cesse ses operations ou si son mecanisme d'horloge est en panne.

Main International Patent Class: **G06F-011/00**
Fulltext Availability:
   Claims

Claim
... C is in
   canonical form if and only if:
   (1) if a processor i is dead, the **row** C(i,x) is
   FALSE, and the **column** C(x,i) is FALSE; and
   (2) if C(i,j) is FALSE, C(ji) is FALSE. This
   ensures symmetric or **bidirectional** connectivity.
   - connected graph: a graph in which no processor is
   isolated from all other processors in the...

...vertices of the graphs are
   the processors, and the edges are the communication
   links. The edges are **bi - directional** .
   The terms "vertex" and "processor" are used
   interchangeably, as are the terms "communication link,"
   "link" and "edge...j) is set to TRUE if the processor i is
   communicatively connected to the processor i (i **pE** j). The
   entry C(i,j) is set to FALSE if the processor i is not
   communicatively...

66

28/5,K/39   (Item 39 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00303259   **Image available**
REPLICATOR SYSTEM AND METHOD FOR DIGITIZING THE GEOMETRY OF A PHYSICAL OBJECT
SYSTEME ET PROCEDE DE REPRODUCTION POUR NUMERISER LA GEOMETRIE D'UN OBJET PHYSIQUE
Patent Applicant/Assignee:
  RADICAL ADVANCED TECHNOLOGIES CORP,
  GUBELMANN Stephen,
Inventor(s):
  GUBELMANN Stephen,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9521410 A1 19950810
  Application: WO 94US1233 19940202   (PCT/WO US9401233)
  Priority Application: WO 94US1233 19940202
Designated States: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KP
  KR KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US UZ VN AT BE
  CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR
  NE SN TD TG
Main International Patent Class: **G06F-003/14**
International Patent Class: **G06F-03:153 ; G06F-15:46** ; G05B-19:02
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 19933

English Abstract
  A system (100) and method for replicating the geometry of a physical
  object (122) includes a computer (102) and storage means (108) for
  storing data representative of features of a multidimensional object
  (122). The system (100) includes an input device (112) that is used for
  identifying locations in three-dimensional space, and for providing
  signals representative of those locations. Means (106) responsive to the
  input signals is provided to define a line in the system extending across
  at least a portion of space defined as containing the object (122). A
  user diverts the input device (112) to a location on the object (122) to
  intersect a portion of a cut plane which is defined on the line. This and
  other user input defined locations are retrieved and stored by the
  computer (102). When finished the collective defined locations are used
  to define the object (122) in three-dimensional space.

French Abstract
  L'invention se rapporte a un systeme (100) et un procede de reproduction
  de la geometrie d'un objet physique (122), ce systeme comprenant un
  ordinateur (102) et un dispositif de stockage (108) pour stocker des
  donnees representant les caracteristiques d'un objet multidimensionnel
  (122). Le systeme (100) comprend un dispositif d'entree (112) qui est
  utilise pour identifier des emplacements dans l'espace tridimensionnel,
  et pour generer des signaux representant ces emplacements. Un dispositif
  (106) sensible aux signaux d'entree est prevu pour creer dans le systeme
  une ligne qui traverse au moins une partie de l'elpace defini comme
  contenant l'objet (122). Un utilisateur transfere le dispositif d'entree
  (112) vers un point sur l'objet (122), afin d'entrecroiser une partie
  d'un plan coupe qui est defini sur la ligne. Ce point et d'autres points
  definis par l'entree d'utilisateur sont extraits et stockes par

l'ordinateur (102). Lorsque cette operation est achevee, les points definis groupes sont utilises pour former l'objet (122) dans l'espace tridimensionnel.

Main International Patent Class: **G06F-003/14**
International Patent Class: **G06F-03:153** ...

... **G06F-15:46**
Fulltext Availability:
  Detailed Description

Detailed Description
... 3 unique pts
  ml = (Ipt2[13-ptl[13)/(pt2EO]-ptIE03)
  ne = (Pt3IlI-pt2El1)/(pt3E03-pt2[03)
  /* construct **perpendicular** bisectors of the two tines with slopes ml,
  m2
  pt4[O]=(ptlEOI+pt2[O])/2
  pt4[11...

...t be used since slope will be infinite
  b5 = pt5[13-m5*pt5L03
  /* intersection of the two **perpendicular** bisectors is the arc center
  /* first bisector must be **vertical** tine in new view */
  /* centerI03 = 05-b4mm4-m5) remove due to divide by zero problems
  center[01...

...0)
  an92 = acos(reLx3/rad)
  else
  ang2 = 360 - acos(reLx3/rad)
  :doit
  CLS -1
  redraw -1
  Mode **normal**
  arc center(Ol. centerI13, center[21, rad, angl, ang2, sysview
  LastEnt=@Lastid
  if (Points)
  for 0=0...

...O],Origin[13,origin[21,BLack
  nderID= lastid
  else
  auto -1
  redraw -1
  goto start
  :exit
  Mode **normal**
  clear PntNodes.PntIDs.ptl, pt2, pt3, pt4j pt5, center, vmx
  if (Finder)
  DELENT FinderlD
  EXIT
  SUBSTITUTE: SHEET...DELENT SpLnEnt[l]
  SptnEnt[OJ=SpLnEnt[11=O
  on Spiane goto XY,XZ,YZ
  Sdptane=O
  :Oti: **pe** =xoit
  :XY
  ARRAY PLnDeflE41E33
  PLnDefl [01 [03=PInDefl 133 CO =Or!gin[01+(GridSize*-1)
  PlnDefl El...

28/5,K/40   (Item 40 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00234265   **Image available**
**SYSTEM   FOR   DIVIDING   PROCESSING   TASKS   INTO   SIGNAL   PROCESSOR   AND
    DECISION-MAKING MICROPROCESSOR INTERFACING**
SYSTEME DE SEPARATION DES TACHES DE TRAITEMENT EN TACHES POUR INTERFACAGE
    AVEC UN PROCESSEUR DE SIGNAUX ET UN MICROPROCESSEUR DE PRISE DE
    DECISION
Patent Applicant/Assignee:
  STAR SEMICONDUCTOR CORPORATION,
Inventor(s):
  ROBINSON Jeffrey I,
  ROUSE Keith,
  KRASSOWSKI Andrew J,
  MONTLICK Terry F,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9308524 A1 19930429
  Application: WO 92US8954 19921014   (PCT/WO US9208954)
  Priority Application: US 91776161 19911015
Designated States: AU CA JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE
Main International Patent Class: **G06F-009/00**
International Patent Class: **G06F-09:40**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 219172

English Abstract
  Architectures and methods are provided for efficiently dividing a
processing task into tasks for a programmable real time signal processor
(SPROC) (10) and tasks for a decision-making microprocessor (2120). The
SPROC is provided with a non-interrupt structure where data flow is
through a multiported central memory. The SPROC is also programmed in an
environment which requires nothing more than graphic entry of a block
diagram of the user's design. In automatically implementing the block
diagram into silicon, the SPROC programming/development environment
accounts for and provides software connection and interfaces with a host
microprocessor (2120). The programming environment preferably includes: a
high-level computer screen entry system which permits choosing, entry,
parameterization, and connection of a plurality of functional blocks; a
functional block cell library (2015) which provides source code
representing the functional blocks; and a signal processor
scheduler/compiler (2040) which uses the functional block cell library
(2015) and the information entered into the high-level entry system to
compile a program and to output source program code for a program memory
and source data code for the data memory of the SPROC, as well as a
symbol table which provides a memory map which maps SPROC addresses to
variable names which the microprocessor (2120) will refer to in
separately compiling its program.

French Abstract
  On decrit des architectures et procedes qui permettent de separer
efficacement une tache de traitement en taches destinees a un processeur
de signaux programmable fonctionnant en temps reel (SPROC)(10) et a un
microprocesseur de prise de decision (2120). Le SPROC est dote d'une
structure depourvue d'interruption ou le flux de donnees arrive par

l'intermediaire d'une memoire centrale a ports multiples. Il est aussi
programme dans un environnement n'exigeant rien d'autre que
l'introduction graphique d'un schema global relatif aux intentions de
l'utilisateur. Avec la realisation automatique du schema global dans le
silicium, l'environnement de programmation et de developpement du SPROC
prend en compte et fournit la connexion au logiciel et realise une
interface avec un microprocesseur hote (2120). Cet environnement de
programmation comporte de preference un systeme d'introduction a ecran
d'affichage perfectionne qui permet de choisir, introduire, parametriser
et fournit une connexion avec differents blocs fonctionnels; une
bibliotheque a cellules de bloc fonctionnel (2015) qui fournit un code
source representant les blocs fonctionnels; et un programmateur/compileur
pour processeur de signal (2040). Ce dernier utilise la bibliotheque a
cellules (2015) et l'information introduite dans le systeme
d'introduction perfectionne pour compiler un programme et delivrer en
sortie un code de programme source concernant une memoire du programme et
un code de donnees source destine a la memoire de donnees du SPROC, ainsi
qu'une table de symboles qu fournit une cartographie memorisee, contenant
les adresses donnees par le SPROC aux differents noms auxquels le
microprocesseur (2120) viendra se referer en compilant separement son
propre programme.

Main International Patent Class: **G06F-009/00**
International Patent Class: **G06F-09:40**
Fulltext Availability:
  Claims

Claim
... the value in the base or frame register (i.e. the "B indexed mode" or
T indexed **mode** ") in order to generate an address, muxBF 487 selects
appropriately the Breg 476 or the Freg 477...n %s", Loa-rec); /* always
print it:
return (i
FUNCTION DEFINITION: row not sent
see if current **row** (string) in an array exists earlier in the array,
return 0 if current entry does not exist...1.1 1991/08/13 13:56:24 allsop
Initial revision
source.sdl
Function:
This routine reads **consecutive** inputs from a file (array) of specified
length, and outputs them, one at a time. The array...infa);
free(item->name-str);
free(item);
end of free-node
#andif
void free List(node t **pe** *List)
y
node-type *work, *temp;
/* traverse List freeing as we go... *1
while (work) C
temp...

 28/5,K/41   **(Item 41 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00207472   **Image available**
IMPROVED MEMORY SYSTEM
SYSTEME DE MEMOIRE AMELIORE
Patent Applicant/Assignee:

HYATT Gilbert P,
Inventor(s):
  HYATT Gilbert P,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9204673 A1 19920319
  Application: WO 91US6285 19910903 (PCT/WO US9106285)
  Priority Application: US 9041 19900904
Designated States: AT BE CA CH DE DK ES FR GB GR IT JP KR LU NL SE
Main International Patent Class: **G06F-012/02**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 137004

English Abstract
  Memory technologies for storing include RAMS and CCDs. Adaptive memory
capability and memory servo capability improve memory characteristics. In
a RAM embodiment, a detector (220B, 220A) is used to detect a memory
address condition (217) and to control the memory (222) and the memory
address register (218) in response thereto. In a CCD embodiment, a
detector (220A, 220B) is used to detect a memory reference signal (217)
and to refresh the memory signals (221A, 221B, 221) in response thereto.
Improved memory refresh, memory performance, and memory capacity enhance
system characteristics. Improved memory architecture provides advantages
of increased speed, lower cost, and efficiency of implementation.
Information stored in memory can be scanned out at a rate greater than
the addressing rate associated with the memories. This permits higher
speed operation with lower cost memories. Use of an output buffer, such
as a FIFO, permits normalization of memory clock rates.

French Abstract
  Les technologies de stockage en memoire comprennent des memoires vives
et des dispositifs a couplage de charge. La fonction memoire adaptative
et la fonction servomemoire ameliorent les caracteristiques de memoire.
Dans un mode de realisation de memoire vive, on utilise un detecteur
(220B, 220A) afin de detecter un etat d'adresse en memoire (217) et afin
de commander la memoire (222) ainsi que le registre d'adresses en memoire
(218) en reponse audit etat. Dans un mode de realisation de dispositif a
couplage de charge, on utilise un detecteur (220A, 220B) afin de detecter
un signal de reference de memoire (217) et afin de regenerer les signaux
memoire (221A, 221B, 221) en reponse a ce dernier. La regeneration, les
performances et la capacite ameliorees de la memoire ameliorent les
caracteristiques du systeme. Une architecture de memoire amelioree offre
les avantages d'une vitesse accrue, d'un cout inferieur et d'une
efficacite de mise en oeuvre. Les informations stockees en memoire
peuvent etre parcourues et extraites a une vitesse superieure a la
vitesse d'adressage associee aux memoires. Cet agencement permet un
fonctionnement a vitesse superieure avec des memoires de cout inferieur.
L'emploi d'un tampon de sortie tel qu'un systeme premier entre premier
sorti (FIFO), permet la normalisation de frequences de base de memoire.

Main International Patent Class: **G06F-012/02**
Fulltext Availability:
  Detailed Description

Detailed Description
... memory on an online basis time shared with refreshing of the display
  on an online basis.

  One **arrangement** of the graphics system of the present invention is

shown in
Fig 1. Supervisory processor 115A loads...vector memory can be performed
in a manner similar to loading the address generators from the
supervisory **processor** , as shown in the LD.ASC program listing herein
and as discussed relative to the supervisory processor...address register
with memory will now be discussed for a special purpose processor; such
as a display **processor** , **array** processor, filter processor, signal
processor, cache memory processor., artificial intelligence processor, or
other application. A memory address...sync pulse, the leading portion of
a line sync pulse in this illustration.

SUBSTITUTE SHEET
-102
The **vertical** sync memory refresh detector circuits and the line sync
memory refresh detector circuits are discussed here for...AND CLSRI AND
CLSR4)
2o The RUN signal covers the period of time when the CFSR1 signal (
vertical sync pulse) is low and either the line sync pulse is low CLSR1
* or the trailing portion...

 28/5,K/42   (Item 42 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00192848
**SCALABLE INTER-PROCESSOR AND PROCESSOR TO I/O MESSAGING SYSTEM FOR PARALLEL
    PROCESSING ARRAYS**
**SYSTEME DE MESSAGERIE EVOLUTIF INTERPROCESSEUR ET PROCESSEUR VERS E/S POUR
    RESEAUX DE TRAITEMENT PARALLELE**
Patent Applicant/Assignee:
  MASPAR COMPUTER CORPORATION,
Inventor(s):
  NICKOLLS John R,
  ZAPISEK John,
  KIM Won S,
  KALB Jeffrey C,
  BLANK W Thomas,
  WEGBREIT Eliot,
  VAN HORN Kevin,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9110197 A1 19910711
  Application: WO 91US77 19910104   (PCT/WO US9100077)
  Priority Application: US 90492 19900105
Designated States: AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL SE SU
Main International Patent Class: **G06F-015/00**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 42225

English Abstract
  A massively parallel computer system (500) is disclosed having a global
  router network in which pipeline registers are spatially distributed to
  increase the messaging speed of the global router network. The global
  router network includes an expansion tap for processor to I/O (1700)
  messaging so that I/O messaging bandwidth matches interprocessor
  messaging bandwidth. A route-opening message packet includes protocol
  bits which are treated homogeneously with steering bits. The
  route-opening packet further includes redundant address bits for

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imparting a multiple-crossbars personality to router chips within the global router network. A structure and method for spatially supporting the processors (700) of the massively parallel system and the global router network are also disclosed.

French Abstract
   Systeme informatique (500) parallele sur une grande echelle, comportant un reseau d'acheminement global dans lequel des registres pipeline sont repartis dans l'espace afin d'augmenter la vitesse de transmission de message du reseau d'acheminement global. Le reseau d'acheminement global comprend un branchement d'expansion permettant la messagerie processeur a E/S (1700), de sorte que la largeur de bande de messagerie E/S s'adapte a la largeur de bande de messagerie interprocesseur. Un paquet de message d'ouverture d'itineraire comprend des bits de protocole, lesquels sont traites de maniere homogene a l'aide de bits de direction. Le paquet d'ouverture d'itineraire comprend egalement des bits d'adresses redondants, destines a conferer une personnalite a barres croisees multiples a des puces d'acheminement situees a l'interieur du reseau d'acheminement global. L'invention concerne egalement une structure et un procede de soutien dans l'espace des processeurs (700) du systeme parallele a grande echelle, et du reseau d'acheminement global.

Main International Patent Class: **G06F-015/00**
Fulltext Availability:
  Detailed Description

Detailed Description
... processor element, PEx,1 has a
  message originating wire 410x coupled to a first terminal
  of a **bidirectional** pipeline latch, i.e., 415x within the
  first stage latch set 415. The suffix x denotes here a
  30 corresponding one of the suffixes for identifying
  individual processor elements **PE** ,, **PE** @,, PE3,, etc. in an
  array AN, individual wires 410a, 410b, 410c, etc. in an
  array-to-stage...

...426b, 426c, etc. in a latch-to
  switch-matrix connecting bus 416. A second terminal of
  each **bidirectional** register 415x is coupled to a first
  stage **horizontally** -extending wire 462x passing from the
  connecting bus 416 into first **bidirectional** switching
  stage 460A. Although arrowheads are shown on the wires
  410x, 462x and others in Figure 4A, it is to be understood
  5that the message routing paths.formed by these wires are
   bidirectional and that the arrows are included merely for
  the sake of simplifying the explanation of a left...

...PEx to the
  target processor PEy or the other way through the opened
  path , from PEY to **PE** ., a
  Within the first NXM (i,e., 16x4) switching stage
  460A. there is provided a number M (i*e,j M=4) of first
  15 stage **vertical** wires 464 extending to overlap the N first
  stage **horizontal** wires 462. Switching elements 463 are
  provided at the intersections of the first-stage
   horizontal and **vertical** wires, 462 and 464, for
  selectively routing a message (either unidirectionally or
  20 **bidirectionally**) through a predetermined one of the first
  stage **horizontally** extending wires 462 and from there, on
  to a header-selected one of the first stage **vertically**
  extending wires 464,

As in the crossbar "wormholing" technique of Fig* 3Bj,
in Figure 4A a route...

...sends a first route-requesting field of bits (B of full
header BFI) onto the first stage **horizontal** wire 462c. A
corresponding switch element 463 in **horizontal** set 463cA,
463cB, 463cC and 463cD closes to thereby "retire" the
first field, B of Header = BF1...

...field with movement of the remaining request-bits (F1 of
Header = BFI) onto a distinguishable one of **vertical** wires
464A, 464B, 464C and 464D.
In Fig. 4A. each first stage vertical wire 464Y (Y
denotes...one of the four wires of wire group WG-A* to a
corresponding one of the four **horizontal** wires,472a
5472a-2, 472a-3 and 472a-4 of substage 460Ba*. Similarly,
each of function boxes 425b*, 425c* and 425d* represents a
IF plurality of H **bidirectional** pipeline registers coupling
the individual wires 465x* of their respective wire groups
WG-Y* to the corresponding...

...stored in the first pipeline latch
415c for one bit period apiece and then forwarded along
first **horizontally** extending line 462c into the first
(hyperbar) switching stage 460A*. Hyperbar stage 460A*
opportunistically grants to the requesting processor, PE31
25 whichever one of the H **vertical** output wires 464B* in
wire-group WG@B*, that is next available. Here, we will
assume that one of other processor elements **PE** , or PE2 has
already grabbed **vertical** wire 464B, and that **vertical** wire
464B. is the next wire available to be granted to PE3 from
30 among the wires...to
10 the "reverse" mode so that the acknowledge signal (ACK)
may be sent back through the **bidirectional** router network
from each recipient device (i.e., PER or IOER) whose
R-register had been set...Since the last bit, n+3, of the forward
MEND packet 552 cannot reach the intended target (**PE** @ or
IOFrr) until 4 bit times after being launched into the
router 560 (because of the time...

...until a bit
time of approximately n+9 or thereafter. The receiving
30 devices (PER or IOER) **normally** need a number of bit times
to evaluate the received address bits Co, C1, RO, R1 and...

...Yz) of the stage-3 router chip 600,,
passes through reverse driver 656, moves down the
corresponding **vertical** wire 641@644, through the closed
route-granting switch GSW(Yz) of the originating **row** x,
10 through the **horizontal** message-data carrying wire 650x,
and from there, into the front end circuitry 610x, wherein
the acknowledge...

...same
reverse path through the stage-2 and stage-1 router chips
600. When the message-originating **PE** , processor receives
20 the acknowledge signal (i.e. the TB, PB = 01 stream), the
message originating processor...

...to the target
processor PET (or 1/0 device IOET) a At that point, the

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originating device **PE** , shuts off a transmit-request flag
25 set in its local T-register 728 (see Fig. 7A)o If no
acknowledge signal (ACK) is sent back to the message
originating processor **PE** ., then the message@originating
processor sees all lows (000 **a 0) indicating ...90
657x weakly to low in cases where no granting switch
GSW(x,Yz) has closed in **row** -x and thus the originating **PE**
will receive a constant 00 as a non-acknowledge signal
during the RCLOSE operation instead of the...

 28/5,K/43   (Item 43 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00154839
**APPARATUS   FOR   ENHANCING   AND   THRESHOLDING   SCANNED   MICROFILM   IMAGES   AND
    METHODS FOR USE THEREIN**
**APPAREIL   PERMETTANT   L'AMELIORATION   ET LA DETERMINATION DU SEUIL D'IMAGES
    MICROFILMEES EXPLOREES, ET SES PROCEDES D'UTILISATION**
Patent Applicant/Assignee:
  EASTMAN KODAK COMPANY,
Inventor(s):
  MORTON Roger Roy Adams,
  REDDEN John Edward,
  LEWIS Scott,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 8901205 A1 19890209
  Application: WO 88US2348 19880714   (PCT/WO US8802348)
  Priority Application: US 87529 19870724
Designated States: AT BE CH DE FR GB IT JP NL SE
Main International Patent Class: **G06F-015/68**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 30892

English Abstract
  Apparatus for enhancing and thresholding scanned microfilm images,
specifically for removing single pixel noise therefrom, and accompanying
methods for use therein are disclosed. Specifically, this apparatus
convolves each one of a pre-defined group of incoming pixel values with a
corresponding one of a pre-defined set of coefficients in order to
generate a convolved pixel value. The convolved pixel is then compared
against a threshold level to produce a thresholded pixel value indicative
of the results of the comparison. The inventive apparatus also includes a
noise processing circuit that contains a noise tracker and a noise
detector and filter circuit. The noise tracker is used to produce a noise
value that tracks a noise level present in the thresholded pixel value.
The noise detector and filter circuit filters pixel noise from the
thresholded pixel value and, in response thereto, produces a
corresponding output pixel value for a current incoming pixel value being
processed and provides a signal to the noise tracker that pixel noise has
been detected. A background tracker, which also forms part of the
inventive apparatus, produces a background value that tracks a background
level present in the incoming pixel values. The background value and the
noise value are combined to produce an error signal which, in turn, is
used, along with a deaveraged value of the current incoming pixel value,
to set the threshold level for the current pixel value being processed.
Specific apparatus for the background tracker and noise tracker, and

accompanying methods for use therein, are also disclosed herein.

French Abstract
  Appareil permettant l'amelioration et la determination du seuil d'images
microfilmees explorees, specifiquement destine a en eliminer le bruit de
pixel unique, et ses procedes d'utilisation. Plus precisement, cet
appareil convolutionne chaque valeur d'un groupe predefini de valeurs de
pixel entrant, avec un coefficient d'un ensemble pre-defini de
coefficients afin de produire une valeur de pixel convolutionne. On
compare ensuite le pixel convolutionne a un niveau de seuil afin de
produire une valeur de pixel a seuil determine indiquant les resultats de
la comparaison. L'appareil de l'invention comprend egalement un circuit
de traitement de bruit comportant un dispositif suiveur de bruit, un
circuit detectant et filtrant le bruit. Le dispositif suiveur de bruit
sert a produire une valeur de bruit suivant un niveau de bruit present
dans la valeur de pixel a seuil determine. Le circuit detectant et
filtrant le bruit filtre le bruit de pixel a partir de la valeur de pixel
a seuil determine et, en reponse a celle-ci, produit une valeur de pixel
de sortie correspondante, destinee a une valeur de pixel entrant actuelle
en cours de traitement, et transmet un signal au dispositif suiveur de
bruit dont le bruit de pixel a ete detecte. Un dispositif suiveur de
fond, faisant egalement partie de l'appareil de l'invention, produit une
valeur de fond suivant un niveau de fond present dans les valeurs de
pixel entrant. On combine la valeur de fond et la valeur de bruit afin de
produire un signal d'erreur qui, a son tour, est utilise, avec une valeur
hors moyenne de la valeur de pixel entrant actuelle, afin d'etablir le
niveau de seuil pour la valeur de pixel en vigueur, en cours de
traitement. Des appareils specifiques destines au dispositif suiveur de
fond et au dispositif suiveur de bruit, ainsi que leurs procedes
d'utilisation sont egalement decrits.

Main International Patent Class: **G06F-015/68**
Fulltext Availability:
  Detailed Description

Detailed Description
... film which, in turn, enters optical
  system 20. The optical system ensures that light
  for only one **horizontal** scanning line, typically
  that lying between rays 14 and 16 inclusive, reaches
  CCD array 22, In practice, optical system 20 is set
  to overscan each **horizontal** scanning line that
  constitutes image 11 by approximately 50%. By doing
  so, the full image will be...

...somewhat
  off center or tilted (as shown in FIG. 1) and/or if
  the CCD becomes slightly **horizontally** mis-aligned
  with respect to the microfilm, Overscanning is
  necessary particularly where rotary microfilmers
  have been used...

...Once the
  current line has been scanned, the film transport
  mechanism (not shown) in the film library **vertically**
  5 advances the film in the direction of arrow 9 to
  appropriately bring the next image of...

...document
  into a proper starting position behind optical
  system 20, Once this occurs, CCD array 22 moves

vertically through the image one scan line at a
time. Lamp 7 is appropriately energized, via lamp
driver...

...situated within image
processing circuit 40,
CCD array 22 typically consists of two
interlaced groups of 1024 **serially connected** CCD
cells: one group for the odd pixels and the other
group for the even pixels. Under...

28/5,K/44   (Item 44 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00106554   **Image available**
DATA PROCESSING SYSTEM
SYSTEME DE TRAITEMENT DE DONNEES
Patent Applicant/Assignee:
  INTEL CORP,
Inventor(s):
  COLLEY S,
  RATTNER J,
  COX G,
  SWANSON R,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 8102477 A1 19810903
  Application: WO 80US205 19800228   (PCT/WO US8000205)
  Priority Application: WO 80US205 19800228
Designated States: DE GB JP AT CH DE FR GB LU NL SE
Main International Patent Class: **G06F-003/00**
International Patent Class: **G06F-07:00 ; G06F-09:00 ; G06F-13:00 ;**
  G06F-15:16 ; G06F-15:20
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 139912

English Abstract
  A data processor architecture wherein the processors recognize two basic
  types of objects, an object being a representation of related information
  maintained in a contiguously addressed set of memory locations. The first
  type of object contains ordinary data, such as characters, integers,
  reals, etc. The second type of object contains a list of access
  descriptors. Each access descriptor provides information for locating and
  defining the extent of access to an object associated with that access
  descriptor. The processors recognize complex objects that are
  combinations of objects of the basic types. One such complex object (94)
  defines an environment (18 or 20) for execution of objects (92, 93, 98,
  106, 122) accessible to a given instance of a procedural operation. The
  dispatching of tasks to the processor is accomplished by
  hardware-controlled queuing mechanisms (36), dispatching-port objects
  (146) which allow multiple sets of processors (38) and (40) to serve
  multiple, but independent sets of tasks (14, 16). Communication between
  asychronous tasks or processes is accomplished by related hardware
  controlled queuing mechanisms (34) (buffered-port objects) (144) which
  allow messages to move between internal processes or input/output
  processes without the need for interrupts. A mechanism (42) is provided
  which allows the processors to communicate with each other. This

mechanism is used to reawaken an idle processor to alert the processor to the fact that a ready-to-run process at a dispatching port needs execution.

French Abstract
   Structure de processeur de donnees dans laquelle les processeurs reconnaissent deux types fondamentaux d'objets, un objet etant constitue par une representation d'informations connexes maintenues dans un groupe d'emplacements de memoire adresse en contiguite. Le premier type d'objets contient des donnees ordinaires, telles que des caracteres, des nombres entiers, reels, etc. Le deuxieme type d'objets contient une liste de descripteurs d'acces. Chaque descripteur d'acces fournit une information servant a localiser et definir l'etendue de l'acces a un objet associe a ce descripteur. Les processeurs reconnaissent des objets complexes constitues par des combinaisons d'objets des types fondamentaux. Un tel objet complexe (94) definit un environnement (18) ou (20) pour l'execution d'objets (92, 93, 98, 106, 122) accessible a un moment donne d'une operation de traitement. La repartition des taches aux processeurs est executee par des mecanismes (36) de mise en file d'attente commandes par le materiel, des objets (146) de points de connexion de repartition permettant a des groupes multiples de processeurs (38 et 40) d'executer des ensembles de taches (14, 16) multiples mais independantes. La communication entre des taches ou traitement asynchrones est executee par les mecanismes (34) relatifs de mise en file d'attente commandes par le materiel (objets de points de connexion dotes d'un tampon) (144) permettant la circulation des messages entre les traitements internes ou les operations d'entree/sortie sans que des interruptions soient necessaires. Un mecanisme (42) est prevu permettant la communication entre les processeurs. Ce mecanisme est utilise pour reactiver un processeur inactif pour signaler au processeur une operation prete a passer a un point de connexion de repartition avant d'etre executee.

Main International Patent Class: **G06F-003/00**
International Patent Class: **G06F-07:00** ...

... **G06F-09:00** ...

... **G06F-13:00** ...

... **G06F-15:16** ...

... **G06F-15:20**
Fulltext Availability:
   Detailed Description

Detailed Description
... system linkage objects called nonbuffered communication ports (104, FIGURE 3A).. Conceptually, a nonbuffe 'red port contains a **single** entry.

They are represented by a single-entry access list, 105, as shown in FIGURE 3.

When...for service
111 - waiting for maintenance
The interpretation of the trace mode subfield is as follows.

00 - **normal mode**
01 - fault trace mode
10 - flow trace mode
11 - full trace mode

The clock-mode bit indicates...qualify processor object
qualify segment table directory
nitialize segment table directory
90
enter alarm mode
enter -diagnostic **mode**
enter **normal** **mode**
diagnose
stop
dequeue
suspend for diagnosis
uspend normally
count value in a processor control segment will be...enter the unassigned
state. SUSPEND NORMALLY implies STOP after suspension is complete if
there are no other **processor** -control flags set, For a
processor which is not currently serving a process, no response is
required...

Set	Items	Description
S1	103	MASSIVELY()PARALLEL()PROCESSOR? OR MPP OR PLURALITY()PROCE-SSING()ELEMENT? OR PPE OR PE OR PROCESSOR()(ARRAY? OR ARRANGE-MENT? OR ORDER OR FORMATION)
S2	113	(SERIAL? OR CONSECUTIVE? OR SUCCESSIVE? OR SEQUENTIAL?)(2N-)(CONNECT? OR LINK?) OR SINGLE()BIT
S3	24	MODE? (3N) (VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUM-N?)
S4	30	MODE? (3N) (HORIZONTAL? OR ROW OR NORMAL?)
S5	21	MODE? (3N) (BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DI-RECTION? OR PERPENDICULAR? OR STRAIGHT()LINE)
S6	0	VERTICAL()(MEMORY OR STORE? OR STORAGE OR ROM)
S7	1510	VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUMN?
S8	1003	HORIZONTAL? OR ROW OR NORMAL?
S9	297	BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DIRECTION? OR -PERPENDICULAR? OR STRAIGHT()LINE
S10	216	S1 OR S2
S11	0	S10 AND S3 AND S4
S12	1	S10 AND S3
S13	0	S10 AND S4
S14	0	S10 AND S5
S15	0	S10 AND S7 AND S8 AND S9
S16	8	S10 AND S7
S17	4	S10 AND S8
S18	1	S10 AND S9
S19	11	S12 OR S16 OR S17 OR S18
S20	11	S19 NOT PY>2000
S21	11	S20 NOT PD>20000831

File 256:SoftBase:Reviews,Companies&Prods. 82-2002/Jul
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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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01544183   DOCUMENT TYPE: Product

PRODUCT NAME: ANZIO (544183)

Rasmussen Software Inc (592153)
10240 SW Nimbus Ave #L9
Portland, OR 97223 United States
TELEPHONE: (503) 624-0360

RECORD TYPE: Directory

CONTACT: Sales Department

ANZIO is a family of products that offer thorough, reliable and easy-to-use
terminal super-emulation between PCs and host systems running any veriant
of UNIX. A full range of file transfer capabilities is also available.
Super-emulation means these products go way beyond simply emulating a dumb
terminal. They provide support for macro keys, user comfort features,
keystroke compatibility, pass-through print and 132- **column   mode** . When
users run any of the programs, their PC becomes a terminal on a host
system. Users can then run any host-based program using a dumb terminal.
Specifically these products emulate many common terminal types including
VT220/ANSI, Wyse 60, ADDS Viewpoint and Verssys C332. The system supports
all versions of Windows, DOS and both TCP/IP and **serial   connections** .
All the products in the family are software only.

DESCRIPTORS: Terminal Emulators; Data Communications

HARDWARE: IBM PC & Compatibles
OPERATING SYSTEM: MS-DOS; Windows; Windows NT/2000
PROGRAM LANGUAGES: Not Available
TYPE OF PRODUCT: Micro
DATE OF RELEASE: 01/83
PRICE: Available upon request; varies by product; demo disk available

DOCUMENTATION AVAILABLE: User manuals
TRAINING AVAILABLE: Technical support
REVISION DATE: 020410

21/5/2
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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01240699   DOCUMENT TYPE: Product

PRODUCT NAME: ICE.TEN (240699)

J River Inc (327263)
211 N 1st St #375
Minneapolis, MN 55401 United States
TELEPHONE: (612) 677-8200

RECORD TYPE: Directory

CONTACT: Sales Department

ICE.TEN is the serial version of ICE. Using **serial** lines to **connect** PCs to UNIX, it supports baud rates to 115,200. The system provides complete terminal emulation yet requires little memory. Windows versions of terminal emulation, file transfer, printing and setup programs are included. It emulates SCO ANSI Color Console, AT&T605, VT102, VT220, IBM3151, AT386 ANSI Color Console, Wyse60 and Wyse160 including WordPerfect View and fax document preview. Features include: (1) 132- **column** by 43-line displays, color and escape sequence features; (2) multiple sessions are available when used with a UNIX multi-session program; (3) file transfer program which uses a familiar Windows point-and-click interface; (4) support for Zmodem as well as **normal** and quoted Xmodem and Ymodem (Zmodem and quoted protocols provide higher reliability for transfers using terminal servers or modems); (5) Host Print which permits Windows applications to print transparently to any UNIX printer and also intercepts and reroutes print jobs (text or graphics) from LPT1, LPT2 and LPT3; (6) terminal emulations support Local Print allowing users to print from a UNIX application to a printer connected to the parallel port of a PC; (7) the configuration program lets users change terminal emulation, program keys, map characters and set up printing; and (8) support for international character sets and keyboards.

DESCRIPTORS: Terminal Emulators; File Transfer; Telecommunications; Data
     Communications

HARDWARE: IBM PC & Compatibles
OPERATING SYSTEM: Windows; Windows NT/2000; UNIX
PROGRAM LANGUAGES: Not Available
TYPE OF PRODUCT: Micro; Workstation
POTENTIAL USERS: Cross Industry
PRICE: Available upon request
REVISION DATE: 001012

21/5/3
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00110355   DOCUMENT TYPE: Review

PRODUCT NAMES: DB2 Universal Database 5 Windows NT   (656852)

**TITLE: Database Relations: SQL Server grande dame DB2 works to improve
in...**
AUTHOR: Winters, David
SOURCE: BackOffice Magazine, p52(6) Aug 1998
ISSN: 1084-6433

RECORD TYPE: Review
REVIEW TYPE: Review
GRADE: A

IBM's recommended DB2 Universal Database 5 on Windows NT is a universal database that provides replication, support for multiple CPUs, support for Windows 95 and Windows 98, **row** -level locking, parallel querying, parallel bulk copying, partition-based named object caches, support for the Web and BLOBs, an Open Database Connectivity (ODBC) interface, and some support for SQL 92. Testers found that the product ran like a Windows NT-customized package, performing extremely well for disk, memory, and CPU usage. DB2 also natively uses the Windows NT Event Log, and users are partly managed using the NT User Manager. The administrative server (DB2DAS00) is required to run comprehensive user administration features locally or remotely. The

interface is greatly improved, but is still awkward and immature. It is
called the Control Center and has a metaphor similar to those of Microsoft
SQL Enterprise Manager, Embarcadero DBArtisan, and Sybase Central; a split
screen provides a tree in the left panel and a detailed right panel.
Testers were surprised to find that building DB2 clients without adding
more components from IBM was quite easy. IBM supports the pure Java
standard, and server-side Java support is provided. Testers determined that
the core server design will definitely support SMP, **MPP** , and
multi-terabyte, and learned from IBM that many large corporations are
multi-terabyte users, although not under Windows NT.

PRICE: $399

COMPANY NAME: IBM Corp (351245)
SPECIAL FEATURE: Screen Layouts Tables Charts
DESCRIPTORS: Database Management; DB2; Parallel Processing; Program
    Development; Windows NT/2000
REVISION DATE: 20000830

21/5/4
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00106928   DOCUMENT TYPE: Review

PRODUCT NAMES: SpectraView 1000   (695203)

TITLE: SpectraView gets calibration right
AUTHOR: Fraser, Bruce
SOURCE: MacWEEK,   v12 n8   p23(2) Feb 23, 1998
ISSN: 0892-8118
HOMEPAGE: http://www.macweek.com

RECORD TYPE: Review
REVIEW TYPE: Review
GRADE: A

SpectraView 1000 from Mitsubishi Electronics America is easy-to-use and
offers accurate color calibration and comprehensive setup controls.
SpectraView's calibration is at least as accurate as either the PressView
21SR from Radius Incorporated or the Barco Personal Calibrator Display
according to measurements of a Minolta CA-100 Color Analyzer. SpectraView
is capable of supporting resolutions of up to 1,600 by 1,200 dpi at a 75-Hz
 vertical scan frequency. This capability plus its calibration produces
accurate, predictable color. One approach to calibrating monitors downloads
a new look-up table to the video card. This approach causes the monitor to
lose some addressable levels of brightness, particularly in the blue
channel. The approach used by SpectraView overcomes this limitation. It
uses a **serial   connection** between the monitor and the host computer to
gain direct control of the amplifiers on the monitor's voltage guns. Until
now, only Radius and Barco used this kind of approach. Mitsubishi is the
first major monitor manufacturer to use this approach with its SpectraView
product. SpectraView lags behind its competitors in using beige instead of
gray on its plastic bezel, and it offers no soft-proofing tools.

PRICE: $3995

COMPANY NAME: Mitsubishi Electronics America Inc   (480134)
SPECIAL FEATURE: Photographs
DESCRIPTORS: Apple Macintosh; Color Matching; Graphics Tools; MacOS;

Screen Utilities
REVISION DATE: 20001130

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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00105776   DOCUMENT TYPE: Review

PRODUCT NAMES: E-Term32 (691534)

TITLE: The Keys To True Emulation
AUTHOR: Hengey, Matt
SOURCE: HP Professional,   v11 n10 p12(1) Oct 1997
ISSN: 0986-145X
HOMEPAGE: http://www.hppro.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Diversified Computer Systems' (DCSi's) E-Term32 is a 32-bit VT320, SCO ANSI
terminal emulation and connectivity package for Windows 95 and Windows NT
4.0. E-Term32 provides a full-functioned FTP client with ping, traceroute,
finger, whois, and NS Lookup utilities. The following conneecetivity support
is provided: direct serial up to 115,200 baud, TAPI modem support, TCP/IP
using WinSock, and LAT using an optional poly/Net 32-bit LAT stack.
E-Term32 operates over Microsoft's multithreaded TCP/IP stack for Windows
95 and Windows NT 4.0. A Session Manager allows creation and editing of
named sessions, and as many as six emulation toolbar groups show on the
screen in user-selected order. A DCL-type scripting language allows
automation of login and file transfer tasks. The scripting language can be
used with support for Dynamic Data Exchange client/server to support other
application communications. Built-in support is provided for Kermit,
XMODEM, YMODEM, and ZMODEM protocols. Therefore, file transfers can be done
over **serial** or networked **connections** ; setup options control size, page
positioning, and orientation of printed host reports. A system engineer who
uses E-Term in a legal billing and accounting software company says his
clients' ability to gain access to 132- **column** reports on 80- **column**
screens without wraparound is a major advantage of E-Term32.

PRICE: $179

COMPANY NAME: Diversified Computer Systems Inc (DCSi)   (349496)
SPECIAL FEATURE: Charts Screen Layouts
DESCRIPTORS: Data Communications; Enterprise Application Integration; File
    Transfer; IBM PC & Compatibles; Terminal Emulators; Windows; Windows
    NT/2000
REVISION DATE: 20010730

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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00103167   DOCUMENT TYPE: Review

**PRODUCT NAMES: Sybase SQL Server (695017); Sybase MPP   (659932); SQL
Anywhere Professional (643025); Sybase IQ (631957); Enterprise Connect
(512389**

TITLE: Sybase Warehousing
AUTHOR: Rennhackkamp, Martin
SOURCE: DBMS,   v10 n9 p85(3) Aug 1997
ISSN: 1041-5173
HOMEPAGE: http://www.dbmsmag.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Sybase's Sybase SQL Server, Sybase **MPP** , SQL Anywhere Professional, Sybase
IQ, and Enterprise Connect are among products highlighted in a discussion
of warehousing tools from Sybase. Sybase's products include database
servers optimized for the particular querying needs of interactive
warehouses. They also include middleware for access to more than one data
source. Integration and management of data movement and distribution within
the enterprise warehouse environment is supported by InfoPump, a low-end
data movement tool that summarizes and aggregates data before delivery to
the warehouse. PowerBuilder, Power++, PowerJ, InfoMaker, and S-Designor
(PowerDesigner) are also available. The tools support Sybase's interactive
warehouse solutions which provide processes, products, and data from Sybase
and other databases. The components are integrated into a comprehensive
framework to gather data from many sources, including mainframe databases,
applications, and external data sources. Sybase IQ (Interactive Query
Accelerator) is the central data warehousing module. It is a DBMS server
created specifically for decision support databases and advanced data
analysis querying. It was built around Sybase's patented Bit-Wise query
processing technology, and used sophisticated performance-optimized
algorithms for advanced ad hoc queries. Data values are indexed in arrays
of bits for each storage **column** , and are called Bit-Wise indexes.

COMPANY NAME: Sybase Inc (414981)
DESCRIPTORS: Data Warehouses; Database Management; Database Servers;
    Decision Support Systems; Information Retrieval; Middleware;
    PowerBuilder; Program Development; SQL Server
REVISION DATE: 20011130

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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00100858   DOCUMENT TYPE: Review

**PRODUCT NAMES: Teradata DBMS   (414468); DB2 Parallel Edition   (623253);
DB2/6000   (441244); DB2 4 MVS   (701866); Non-Stop SQL   (311154); Sybase
MPP   (659932**

TITLE: Taming Data Giants: Part 2
AUTHOR: Brobst, Stephen Robertson, Owen
SOURCE: DBMS,   v10 n3 p63(6) Mar 1997
ISSN: 1041-5173
HOMEPAGE: http://www.dbmsmag.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

NCR's Teradata DBMS, IBM's DB2/6000 and DB2 Parallel Edition, and DB2 4 on
MVS, Sybase's **MPP** , and Tandem Computers' Non-Stop SQL are products

highlighted in a discussion of techniques for management of mammoth databases. Three main methods are used to partition huge databases: hash, key-range, and round-robin partitioning. Hash requires a DBA to choose **columns** for each table to be used as input to a hashing function that determines the database partition upon which each table **row** will be assigned and stored. Key-range distributes data rows over the database partitions based on a preset key range related to each partition. Round robin is the easiest to implement of the three. It places rows in partitions as if the database were dealing out cards. Data is distributed efficaciously for high-volume loading or insert-selects into a large table. Straightforward activity means speed, so the round-robin method can distribute rows into a target table about 5 percent faster than the hashing method of partitioning. Teradata, DB2/6000 Parallel Edition, and **MPP** use the hash partitioning method for VLDB implementations. Other topics covered are Oracle 7.3's optimizer intelligence and syntactic extensions for improved efficiency; advantages and disadvantages of each partitioning method; 3-tier application design; Online Transaction Processing (OLTP) on shared-nothing databases; and intelligent indexing.

COMPANY NAME: NCR Corp (552798); IBM Corp (351245); Compaq Computer Corp
     (462977); Sybase Inc (414981)
DESCRIPTORS: Database Management; DB2; Distributed Processing; IBM; IBM
     RS/6000; MVS; Non-Stop Kernel; Parallel Processing; Program Development
     ; System Performance; Tandem; Teradata
REVISION DATE: 20020618

21/5/8
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00075891   DOCUMENT TYPE: Review

**PRODUCT NAMES: MARC (558257); Abaqus (558265); MSC.Nastran (015830);
MSC.Patran (010764)**

TITLE: Analysis Tools in Tune with Design
AUTHOR: Beckert, Beverly A
SOURCE: Computer-Aided Engineering,   v14 n3 p70(3) Mar 1995
ISSN: 0733-3536
HOMEPAGE: http://www.penton.com/cae/

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Analysis programs are used increasingly in design applications, as users have access to faster computer hardware, better software and graphics, and more intuitive interfaces. The developer of the Marc finite-element analysis (FEA) solvers agrees with other analysts that analysis products speed up simulation and offer several design alternatives. The vendor of the Abaqus FEA solvers agrees, and Ansys founder, John Swanson, states that more intuitive analysis software is also responsible. A spokesman for the developer of MSC/NASTRAN and MSC/Patran FEA/FEM products states that gradual hardware/software improvements mean that more engineers can use analysis products to shorten turnaround time and product cycles. Systems supporting scalable parallel processing (SPP) are available, providing massively parallel processing (**MPP**) system architecture in an easy to use environment. Future systems will be more automated and will support **vertical** applications.

COMPANY NAME: MSC.Software Corp (083780); Hibbitt Karlsson & Sorensen
    (603856)
DESCRIPTORS: CAD; CAD CAM; CAE; Engineering; FEA (Finite Element Analysis)
    ; Simulation
REVISION DATE: 20000823

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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00070388   DOCUMENT TYPE: Review

PRODUCT NAMES: SNMP   (830056)

TITLE: UPS Control Via SNMP Soon to Be Reality
AUTHOR: Stokinski, C Adam
SOURCE: Computer Technology Review,   v14 n10 ps29(4) Oct 1994
ISSN: 0287-9647
HOMEPAGE: http://www.westworldproductions.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

UPS manufacturers have long provided SNMP with their proprietary MIBs.
However, the IETF has now adopted a standard MIB, which will provide a more
open means to achieve power management and control. The UPS-MIB can
integrate any UPS into a centralized view of all power control points over
a network. A UPS is a device that provides auxiliary power when **normal**
utility power may be disrupted. Remote monitoring and manipulation of
distributed control points from a central platform provides several needed
conveniences for the network administrator. The older, one-on-one **serial**
connection to the UPS would cause the system to execute its own shut-down
routine. But connecting the UPS to the network means that the system must
be shut down from the network itself. The UPS alarms are sent to the SNMP
NMS management platform, instead of to the file server or host.

COMPANY NAME: Vendor Independent (999999)
SPECIAL FEATURE: Charts
DESCRIPTORS: Network Administration; Network Management; Network Software;
    Standards; System Monitoring
REVISION DATE: 20020630

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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00070386   DOCUMENT TYPE: Review

PRODUCT NAMES: Operating Systems (830344)

TITLE: Growing Into Networking with Multiuser DOS
AUTHOR: Shalita, Steven P
SOURCE: Computer Technology Review,   v14 n10 p16(3) Oct 1994
ISSN: 0287-9647
HOMEPAGE: http://www.westworldproductions.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

The LAN has become a common business tool. Client/server technology is also growing, as users require better methods of managing large amounts of data. This has resulted in a trend toward workgroup computing solutions being implemented within the LAN system. One popular method is use of an MDOS (multi-user DOS) systems. MDOS is used often in **vertical** markets and process control, and provides an alternative to LAN and UNIX technology. Many workgroups are using MDOS host systems with a centralized NetWare connection as a shared terminal workgroup. An MDOS system can be an effective platform for implementing database-intensive workgroups. They do not require the same transference of data from server to nodes as do LAN solutions. An MDOS system has only one PC with a single CPU for a host computer, and users have serial terminals on their desktop that are connected to the host by **serial   connections** direct to the host.

COMPANY NAME: Vendor Independent   (999999)
SPECIAL FEATURE: Charts
DESCRIPTORS: Client/server; LAN Alternatives; Network Software; Operating
     Systems
REVISION DATE: 19950228

   21/5/11
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00064863   DOCUMENT TYPE: Review

PRODUCT NAMES: X Window   (830048); Telecommuting   (830232)

TITLE: Telecommuting by X
AUTHOR: Wood, Dave
SOURCE: X Journal,   v3 n5 p36(6) May/Jun 1994
ISSN: 1056-7003

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

The X protocol can facilitate telecommuting, letting office workers bring office capabilities to their homes. The enabling technology for telecommuting is the ability to transfer the X protocol over a simple telephone line. In one computer company, telecommuting is widespread, with over 300 employees working from home at least part-time. Home-based workers employ the X Window system and X Remote, a proprietary protocol for remote **serial** X **connections** . The workers connect directly to the office network, as if they were physically in the office. The X Remote protocol has offered an improvement in speed and productivity. The X Remote process requires V.32 modems running at 9600 bps, and full-duplex modems are recommended to get the full advantage, since the X protocol is heavily **bidirectional** .

COMPANY NAME: Vendor Independent   (999999)
DESCRIPTORS: Office Automation; Telecommunications; Telecommuting; X
     Window
REVISION DATE: 19990330

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```
·Set    Items    Description
S1      69113    MASSIVELY()PARALLEL()PROCESSOR? OR MPP OR PLURALITY()PROCE-
                 SSING()ELEMENT? OR PPE OR PE OR PROCESSOR()(ARRAY? OR ARRANGE-
                 MENT? OR ORDER OR FORMATION)
S2       9780    (SERIAL? OR CONSECUTIVE? OR SUCCESSIVE? OR SEQUENTIAL?)(2N-
                 )(CONNECT? OR LINK?) OR SINGLE()BIT
S3      33901    MODE? (3N) (VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUM-
                 N?)
S4      80333    MODE? (3N) (HORIZONTAL? OR ROW OR NORMAL?)
S5       5948    MODE? (3N) (BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DI-
                 RECTION? OR PERPENDICULAR? OR STRAIGHT()LINE)
S6        191    VERTICAL()(MEMORY OR STORE? OR STORAGE OR ROM)
S7     995770    VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUMN?
S8    2521522    HORIZONTAL? OR ROW OR NORMAL?
S9     294552    BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DIRECTION? OR -
                 PERPENDICULAR? OR STRAIGHT()LINE
S10         0    S1 AND S2 AND S3 AND S4 AND S5
S11        92    S1 AND S2
S12         0    S3 AND S4 AND S5 AND S6
S13         5    S3 AND S4 AND S5
S14         0    S11 AND S3
S15         0    S11 AND S4
S16         0    S11 AND S5
S17         0    S11 AND S6
S18     78801    S1 OR S2
S19         0    S18 AND S3 AND S4 AND S5
S20        80    S18 AND S3
S21        11    S20 AND S4
S22         0    S20 AND S5
S23         0    S20 AND S5
S24         0    S S18 AND S6
S25         0    S18 AND S6 AND S8 AND S9
S26         0    S18 AND S6
S27      2563    S18 AND S7
S28       611    S27 AND S8
S29         9    S28 AND S9
S30        28    S11 AND S7
S31         2    S30 AND S8
S32         3    S30 AND S9
S33        16    S13 OR S21
S34        35    S29 OR S30
S35        51    S33 OR S34
S36        47    S35 NOT PY>2000
S37        47    S36 NOT PD>20000831
S38        29    RD (unique items)
```

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38/5/1   (Item 1 from file: 238)

0243332   ANTE NUMBER: 9303224
Parallel DFT computation on bit - serial **systolic** processor   arrays
AUTHOR(S): Jones, K. J.
JOURNAL: IEE Proceedings E. Computers and Digital Techniques 140 (1) Jan 93
  p.10-18. il.refs.
PUBLICATION YEAR: 1993
ISSN: 0143-7062
BLDSC SHELF MARK: 4362.7540
LANGUAGE: English

ABSTRACT: Shows how novel one- and two-dimensional systolic processing
  architectures can carry out hardware-efficient parallel implementation of
  the N-point discrete Fourier transform. Throughput rates are superior to
  the conventional linear array. The processor is in **bit - serial** form
  using **single - bit** half-adder and full-adder circuits, and comprises up
  to N coordinate rotation digital computer processing elements.
  (Original abstract-amended)

DESCRIPTORS: **Bit   serial** systolic array processors;   Solution;
  Discrete Fourier transforms;

38/5/2   (Item 1 from file: 8)

05556384   E.I. No: EIP00055171379
  Title: **Extending a turbid medium BRDF model to allow sloping terrain with
a vertical plant stand**
  Author: Combal, Bruno; Isaka, Harumi; Trotter, Craig
  Corporate Source: Universite Blaise Pascal, Clermont-Ferrand, Fr
  Source: IEEE Transactions on Geoscience and Remote Sensing v 38 n 2 I
2000. p 798-810
  Publication Year: 2000
  CODEN: IGRSD2   ISSN: 0196-2892
  Language: English
  Document Type: JA; (Journal Article)   Treatment: G; (General Review)
  Journal Announcement: 0007W1
  Abstract: This paper extends the turbid medium approach used for
modeling bidirectional reflectance from **horizontal** plant canopies to
sloping terrain with a vertically oriented plant stand. Previous treatments
have accounted for terrain slope by simple adaptation to an inclined plane
of **models** for **horizontal** surfaces. However, such treatments implicitly
assume that plants grow perpendicularly to the surface, despite the fact
that plant stems continue to grow vertically on slopes. We investigate the
differences between our new ' **vertical** growth' **model** and the more usual
'perpendicular to the surface growth' model in terms of the effect on
canopy albedo and bidirectional reflectance factors. Although the effect of
leaf angle distribution on the albedo is different for both the
vertical-growth and **perpendicular** -growth **models** , it appears to be a
much smaller effect than that due to terrain slope. For the bidirectional
reflectance factors (BRF's), the magnitude and sign of the differences
between the two models varies with the direction of observation, the slope,
and the leaf angle distribution, and can exceed 10% for a planophile
canopy. A comparison between modeled and measured data shows that **model**
predictions under the **vertical** growth assumption are consistent with
measurements, whereas the assumption of perpendicular growth can lead to

large errors. (Author abstract) 25 Refs.
   Descriptors: *Plants (botany); Landforms; Optical properties;
Mathematical models; Vegetation; Satellites; Image processing
   Identifiers: Bidirectional reflectance factors; Albedo; Vertical plant
stand; Sloping terrain
   Classification Codes:
   461.9 (Biology); 481.1 (Geology); 741.1 (Light/Optics); 921.6
(Numerical Methods); 655.2 (Satellites); 723.2 (Data Processing)
   461 (Biotechnology); 481 (Geology & Geophysics); 741 (Optics & Optical
Devices); 921 (Applied Mathematics); 655 (Spacecraft); 723 (Computer
Software)
   46 (BIOENGINEERING); 48 (ENGINEERING GEOLOGY); 74 (OPTICAL TECHNOLOGY)
; 92 (ENGINEERING MATHEMATICS); 65 (AEROSPACE ENGINEERING); 72
(COMPUTERS & DATA PROCESSING)

   38/5/3   (Item 2 from file: 8)
   **Title: Using emulations to enhance the performance of parallel
architectures**
   Author: Obrenic, Bojana; Herbordt, Martin C.; Rosenberg, Arnold L.;
Weems, Charles C.
   Corporate Source: Queen's Coll, Flushing, NY, USA
.Abstract: We illustrate the potential of techniques and results from the
theory of network emulations to enhance the performance of a parallel
architecture. The vehicle for this demonstration is a suite of algorithms
that endow an N-processor **bit - serial processor array** A with a
`meta-instruction' GAUGE k, which (logically) reconfigures A into an
N/k-processor virtual machine B//k that has: 1) a datapath and memory bus
whose emulated width is k bits, as opposed to A's 1-bit width and 2) an
instruction set that operates on k-bit words, in contrast to A's
instruction set, which operates on 1-bit words. In order to stress the
strength of the approach, we show (via pseudocode) how our emulation
techniques can be implemented efficiently even if A operates in strict SIMD
mode, with only **single - bit** masking capabilities and with no indexed
memory accesses. We describe at an algorithmic level how to implement our
technique - including datapath conversion (`corner-turning') and the
creation of the word-parallel instruction sets - on arrays of any regular
network topology. We instantiate our technique in detail for arrays based
on topologies with quite disparate characteristics: the hypercube, the de
Bruijn network, and a genre of mesh with reconfigurable buses. Importantly,
the emulations that underlie our technique do not alter the native
machine's instruction set, hence allowing an invariant programming model
across gauges. (Author abstract) 30 Refs.
   Descriptors: *Parallel processing systems; Computer architecture;
Parallel algorithms; Electric network topology; Interconnection networks;
Computer systems programming
   Identifiers: Parallel architectures; Multiprocessor interconnection
   Classification Codes:
   722.4 (Digital Computers & Systems); 703.1 (Electric Networks); 723.1
(Computer Programming)

722 (Computer Hardware); 723 (Computer Software); 921 (Applied Mathematics); 703 (Electric Circuits)
72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS); 70 (ELECTRICAL ENGINEERING)

38/5/4   (Item 3 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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03310421   E.I. Monthly No: EI9110118900
  Title: **Efficient compensation-path finding algorithm for a large-scale** processor array .
  Author: Ozawa, Takao
  Corporate Source: Kyoto Univ, Kyoto, Jpn
  Source: Systems and Computers in Japan v 22 n 1 1991 p 28-38
  Publication Year: 1991
  CODEN: SCJAEP   ISSN: 0882-1666
  Language: English
  Document Type: JA; (Journal Article)   Treatment: T; (Theoretical); A; (Applications); X; (Experimental)
  Journal Announcement: 9110
  Abstract: This paper presents an algorithm for constructing a systolic array from a large-scale rectangular grid array of processing elements (PEs), some of which may be faulty. Very recently, Kung et al. reduced this construction problem to finding compensation paths (CPs) which are extended from faulty PEs to spare PEs placed on the periphery of the rectangular array, and which satisfy the following conditions. Each of the CPs: (1) must be a **horizontal** or **vertical straight line** ; (2) must not go through any other faulty **PE** ; (3) must not cross any other CP; and (4) for each of the CPs there exists no other CP running in parallel and in the **opposite direction** with distance 1. The algorithm of this paper solves the foregoing CP finding problem efficiently by taking advantage of certain properties of the grid array. Suppose that the array is placed on the x-y plane. First, the algorithm sorts the faulty PEs with respect to their x and y coordinates and constructs four queues for faulty PEs. Then it attempts repeatedly to find CPs for the four PEs at the exists of the four queues. At this step it uses a novel branch-and-bound method considering the relative positions of the four faulty PEs on the x-y plane. The time complexity of the algorithm is $O(n^{**}3)$ in the worst cases, where n is the number of faulty PEs. However, it can be shown that such cases rarely happen, and in almost all cases it solves the problem in $O(n^{**}2)$ time. The space complexity is $O(n)$. (Author abstract)
  Descriptors: *DATA STORAGE, DIGITAL--*Cellular Arrays; MATHEMATICAL TECHNIQUES--Algorithms; COMPUTERS--Circuits
  Identifiers: PROCESSING ELEMENTS (**PE**); COMPENSATION PATH (CP); SYSTOLIC ARRAYS
  Classification Codes:
  721 (Computer Circuits & Logic Elements); 921 (Applied Mathematics); 722 (Computer Hardware); 723 (Computer Software)
  72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

38/5/5   (Item 4 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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03073049   E.I. Monthly No: EI9106069396
  Title: **Representing and computing regular languages on massively parallel networks.**
  Author: Miller, Michael I.; Roysam, Badrinath; Smith, Kurt R.;

O'Sullivan, Joseph A.
  Corporate Source: Dept of Electr Eng, Washington Univ, St Louis, MO, USA
  Source: IEEE Transactions on Neural Networks v 2 n 1 Jan 1991 p 56-72
  Publication Year: 1991
  CODEN: ITNNEP   ISSN: 1045-9227
  Language: English
  Document Type: JA; (Journal Article)   Treatment: L; (Literature
Review/Bibliography); T; (Theoretical)
  Journal Announcement: 9106

  Abstract: A general method is proposed for incorporating rule-based
constraints corresponding to regular languages into stochastic inference
problems, thereby allowing for a unified representation of stochastic and
syntactic pattern constraints. The authors' approach establishes the formal
connection of rules to Chomsky grammars and generalizes the original work
of Shannon on the encoding of rule-based channel sequences to Markov chains
of maximum entropy. This maximum entropy probabilistic view leads to Gibbs
representations with potentials which have their number of minima growing
at precisely the exponential rate that the language of deterministically
constrained sequences grow. These representations are coupled to stochastic
diffusion algorithms, which sample the language-constrained sequences by
visiting the energy minima according to the underlying Gibbs probability
law. The coupling to stochastic search methods yields the all-important
practical result that fully parallel stochastic cellular automata can be
derived to generate samples from the rule-based constraint sets. The
production rules and neighborhood state structure of the language of
sequences directly determine the necessary connection structures of the
required parallel computing surface. Representations of this type have been
mapped to the DAP-510 **massively   parallel   processor** consisting of 1024
mesh- **connected   bit** – **serial** processing elements for performing
automated segmentation of electron-micrograph images. 66 Refs.
  Descriptors: *NEURAL NETWORKS; AUTOMATA THEORY--Formal Languages;
PROBABILITY--Random Processes; IMAGE PROCESSING; COMPUTER PROGRAMMING--
Algorithms
  Identifiers: MASSIVELY PARALLEL NETWORKS; RULE BASED CONSTRAINTS;
STOCHASTIC INFERENCE PROBLEMS
  Classification Codes:
  723 (Computer Software); 721 (Computer Circuits & Logic Elements); 922
(Statistical Methods)
  72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

  38/5/6   (Item 5 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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02954861   E.I. Monthly No: EI9009105747
  Title: Bit – serial **VLSI array processing chip for image processing.**
  Author: Heaton, Robert; Blevins, Donald; Davis, Edward
  Corporate Source: Microelectronics Cent of North Carolina, Research
Triangle Park, NC, USA
  Source: IEEE Journal of Solid-State Circuits v 25 n 2 Apr 1990 p 364-368
  Publication Year: 1990
  CODEN: IJSCBC   ISSN: 0018-9200
  Language: English
  Document Type: JA; (Journal Article)   Treatment: T; (Theoretical); A;
(Applications)
  Journal Announcement: 9009
  Abstract: An array processing chip integrating 128 **bit** – **serial**
processing elements (PEs) on a single die is discussed. Each **PE** has a
16-function logic unit, a **single** – **bit** adder, a 32-b variable-length
shift register, and 1 kb of local RAM. Logic in each **PE** provides the

capability to mask PEs individually. A modified grid interconnection scheme
allows each **PE** to communicate with each of its eight nearest neighbors. A
32-b bus is used to transfer data to and from the array in a single cycle.
Instruction execution is pipelined, enabling all instructions to be
executed in a single cycle. The 1- mu m CMOS design contains over
1.1-million transistors on an 11.0-mm multiplied by 11.7-mm die. 4 Refs.
   Descriptors: *INTEGRATED CIRCUITS, VLSI--*Performance; IMAGE PROCESSING;
LOGIC CIRCUITS; DATA STORAGE, DIGITAL--Random Access; SEMICONDUCTOR
DEVICES, MOS
   Identifiers: SINGLE DIE; **SINGLE - BIT** ADDER; SINGLE CYCLE; 1.1-MILLION
TRANSISTORS; VLSI ARRAY; RAM
   Classification Codes:
   713 (Electronic Circuits); 714 (Electronic Components); 723 (Computer
Software); 741 (Optics & Optical Devices); 721 (Computer Circuits & Logic
Elements); 722 (Computer Hardware)
   71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 74
(OPTICAL TECHNOLOGY)

38/5/7   (Item 6 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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02837523   E.I. Monthly No: EIM8912-048770
   Title: **BLITZEN: a VLSI array processing chip.**
   Author: Heaton, Robert A.; Blevins, Donald W.
   Corporate Source: Microelectron Cent, Research Triangle Park, NC, USA
   Conference Title: Proceedings of the IEEE 1989 Custom Integrated Circuits
Conference
   Conference Location: San Diego, CA, SA   Conference Date: 19890515
   Sponsor: IEEE, Electron Devices Soc, New York, NY, USA; IEEE, Solid-State
Circuits Council, USA; IEEE, Rochester Section, USA
   E.I. Conference No.: 12624
   Source: Proceedings of the Custom Integrated Circuits Conference. Publ by
IEEE, IEEE Service Center, Piscataway, NJ, USA. Available from IEEE Service
Cent (cat n 89CH2671-6), Piscataway, NJ, USA. p 12.1/1-5
   Publication Year: 1989
   CODEN: PCICER   ISSN: 0886-5930
   Language: English
   Document Type: PA; (Conference Paper)   Treatment: A; (Applications); T;
(Theoretical)
   Journal Announcement: 8912
   Abstract: An array processing chip for the BLITZEN massively parallel
SIMD (single-instruction multiple-data-stream) computer has been developed.
The chip includes 128 **bit - serial** processing elements (PEs) connected in
a modified grid. Each **PE** contains a 16-function logic unit, a **single -
bit** adder, a 32-bit, variable-length shift register, and 1k of local RAM.
The 1- mu m CMOS design contains over 1.1 million transistors on a 110-mm
by 11.7-mm die. 5 Refs.
   Descriptors: *INTEGRATED CIRCUITS, VLSI--*Performance; COMPUTERS, DIGITAL
   Identifiers: ARRAY PROCESSING CHIP; SIMD (SINGLE-INSTRUCTION
MULTIPLE-DATA-STREAM)
   Classification Codes:
   713 (Electronic Circuits); 714 (Electronic Components); 721 (Computer
Circuits & Logic Elements); 722 (Computer Hardware)
   71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

38/5/8   (Item 7 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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02185287   E.I. Monthly No: EI8704031982
   Title: **MOBILE-PHASE OPTIMIZATION IN GRADIENT-ELUTION HPLC FOR THE SEPARATION OF THE PHENYLTHIOHYDANTOIN-AMINO ACIDS.**
   Author: Glajch, J. L.; Kirkland, J. J.
   Corporate Source: DuPont, Wilmington, DE, USA
   Source: Journal of Chromatographic Science v 25 n 1 Jan 1987 p 4-11
   Publication Year: 1987
   CODEN: JCHSBZ   ISSN: 0021-9665
   Language: ENGLISH
   Document Type: JA; (Journal Article)   Treatment: X; (Experimental)
   Journal Announcement: 8704
   Abstract: A general method for optimizing gradient-elution separations is described and applied to the specific separation of the 20 PTH-amino acid derivatives. The optimum separation of these compounds is shown to be performed in 25 min using a **PE   column** with a ternary gradient containing phosphate buffer, methanol, and tetrahydrofuran as the mobile phase. The specific optimized gradient-elution separation is compared to a previously reported optimized isocratic separation, and advantages of each system are compared. Additional influences on separation selectivity for the PTH-amino acids, such as ionic strength and the use of **serially connected   columns** , are also investigated. (Author abstract) 24 refs.
   Descriptors: *AMINO ACIDS--*Chromatographic Analysis; SEPARATION--Optimization; CHROMATOGRAPHIC ANALYSIS--Liquid
   Identifiers: MOBILE-PHASE OPTIMIZATION; PHENYLTHIOHYDANTOIN-AMINO ACIDS; STATIONARY PHASE SELECTIVITY
   Classification Codes:
   804   (Chemical Products); 801   (Chemical Analysis & Physical Chemistry); 802   (Chemical Apparatus & Plants)
   80   (CHEMICAL ENGINEERING)

   38/5/9   (Item 8 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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01348370   E.I. Monthly No: EI8305035884   E.I. Yearly No: EI83059662
   Title: **INFLUENCE OF PLANETARY BOUNDARY LAYER PHYSICS ON FRONTAL STRUCTURE IN THE HOSKINS-BRETHERTON** HORIZONTAL **SHEAR** MODEL .
   Author: Keyser, Daniel; Anthes, Richard A.
   Corporate Source: Pa State Univ, University Park, USA
   Source: Journal of the Atmospheric Sciences v 39 n 8 Aug 1982 p 1783-1802
   Publication Year: 1982
   CODEN: JAHSAK   ISSN: 0099-7005
   Language: ENGLISH
   Journal Announcement: 8305
   Abstract: A series of numerical experiments with the Hoskins-Bretherton **horizontal** shear **model** of frontogenesis in an amplifying, two-dimensional baroclinic wave is performed. The analytic solutions from the Boussinesq, semi-geostrophic model provide initial conditions for numerical integrations with a two-dimensional, dry version of the fully compressible, hydrostatic primitive equation (**PE**) model of Anthes and Warner with 40 km **horizontal** resolution. The **PE   model** is integrated 1) without planetary boundary layer (PBL) physics; 2) with a one-layer bulk-drag scheme; and 3) with a high- **vertical** -resolution PBL **model** . The lower boundary is thermally insulated in order to isolate the effect of the internal mixing of heat in the PBL. The simulation with the high-resolution PBL physics resolves several realistic features. 37 refs.
   Descriptors: *METEOROLOGY
   Classification Codes:
   443 (Meteorology)

44   (WATER & WATERWORKS ENGINEERING)

38/5/10   (Item 1 from file: 35)

01391849   ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
INTERNAL SEICHES AND BAROCLINIC CURRENTS IN LAKE BANYOLES (SPAIN)
 Original Title: SEQUES INTERNES I CORRENTS BAROCLINICS A L'ESTANY DE
    BANYOLES

  Author: ROGET I ARMENGOL, ELENA
  Year: 1992
  Corporate Source/Institution: UNIVERSITAT AUTONOMA DE BARCELONA (SPAIN)
(5852)
  Source: VOLUME 56/01-C OF DISSERTATION ABSTRACTS INTERNATIONAL.
          PAGE 86.   303 PAGES
  Descriptors: BIOLOGY, LIMNOLOGY
  Descriptor Codes: 0793
  Language: SPANISH
  ISBN: 84-7929-533-3
  Publisher: SERVEI DE PUBLICACIONS DE LA UNIVERSITAT AUTONOMA DE
                BARCELONA, EDIFICI RECTORAT, APARTAT POSTAL 20, E-08193
                BELLATERRA (BARCELONA), SPAIN

     This is the first time that the internal seiches in Lake Banyoles (A =
112 $\rm Hm\sp2,$ V = 16 $\rm Hm\sp3)$ have been described. For their study
a unidimensional model of two layers and two bidimensional models of two
and three layers have been used. During the summer, the metalimnion is very
thick and the lake reacts as composed by three layers and the second
vertical   mode is excited. In this case, the maximum amplitude of the
vertical displacements at the lower interface of the metalimnion--between 1
and 2 m--is always higher--up to 5 times--the vertical displacements at the
upper interface. In Lake Banyoles the second **vertical   mode** propagates
either in the direction of the main axis of the lake (longitudinal **mode**)
or **perpendicular** to that (transversal **mode**) depending on the wind which
forces the set-up. From the end of August to half of October, the period of
this second **vertical   mode** when it develops as the first **horizontal**
longitudinal **mode** is of between 4 and 7 hours, while that of the second
horizontal longitudinal **mode** is of between 2 and 4 hours, approximately.
The period of the first transversal mode is always very close to the second
longitudinal but a little smaller. The observed amplitudes are of about 1
metre.
     Because of the different relation between the area and the volume in
the northern and the southern lobes, and because of the difference in the
heat inflow coming from the underground sources at the two lobes, the
northern lobe cools quicker than the southern. This fact forces a
baroclinic or density current which flows from north to south.
     Either from direct current--at the neck between the two lobes
velocities up to 12 cm/s and with daily mean values of about 5 cm/s are
measured--and temperature measurements or from a heat balance where the
whole lake is considered to be composed by two homogeneous systems (the
northern and the southern lobes) which are connected between them, a
baroclinic current of the order of $10\sp4$ l/s is found and thus, the
water in the northern lobe is renovated about every five days. Thus, it is
expected that this baroclinic current, because of its magnitude, apart of
reducing the differences between the two lobes, influences the lakewide
circulation. (Abstract shortened by UMI.)

757377   ORDER NO: AAD81-20445
**FRONTOGENESIS IN THE PLANETARY BOUNDARY LAYER OF AN AMPLIFYING,
TWO-DIMENSIONAL BAROCLINIC WAVE**
 Author: KEYSER, DANIEL
 Degree: PH.D.
 Year: 1981
 Corporate Source/Institution: THE PENNSYLVANIA STATE UNIVERSITY (0176)
 Source: VOLUME 42/04-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
   PAGE 1497. 314 PAGES
 Descriptors: PHYSICS, ATMOSPHERIC SCIENCE
 Descriptor Codes: 0608

 Despite recent theoretical advances in understanding the dynamics of
surface frontogenesis, considerable discrepancies remain between the
idealized frontal structures derived from the two-dimensional, isentropic,
inviscid frontogenesis models and the detailed structures revealed through
observational studies. In order to explore the hypothesis that the absence
of fine structure is related to the neglect of nonconservative processes
such as the vertical turbulent transports of heat and momentum in the
planetary boundary layer (PBL), a series of analytic and numerical
experiments with the Hoskins-Bretherton **horizontal** shear **model** of
frontogenesis in an amplifying, two-dimensional baroclinic wave is
performed.
 The analytic solutions from the Boussinesq, semi-geostrophic
Hoskins-Bretherton **horizontal** shear **model** under the restriction of
uniform buoyancy frequency are reproduced in order to provide initial
conditions for, and a control case for comparison with, numerical
integrations obtained with a two-dimensional, dry version of the fully
compressible, hydrostatic primitive equation (**PE**) model of Anthes and
Warner integrated with 40-km **horizontal** resolution. The **PE** **model** is
integrated (1) without PBL physics; (2) with a one-layer bulk-drag scheme;
and (3) with a high- **vertical** -resolution PBL **model** . In both alternatives
utilizing PBL physics, the lower boundary is thermally insulated in order
to isolate the effect of the internal mixing of heat in the PBL.
 Surface frontogenesis in the analytic **horizontal** shear **model**
is diagnosed quantitatively in terms of the prognostic equations for the
relative vorticity, the cross-front gradient of potential temperature, and
the stability. Frontogenesis is interpreted as a geostrophic adjustment
process in which the components of the thermal wind relation, representing
the mass and wind fields, continuously adjust to imbalances forced by the
frontogenetical geostrophic horizontal shear through a thermally direct
ageostrophic circulation in the cross-front, vertical plane. The energetics
of the finite-amplitude baroclinic wave containing the frontal zone are
examined in order to search for an explanation for the subordinate role of
frontolytical vertical motions compared to the frontogenetical horizontal
component of the ageostrophic circulation. The wavenumber-dependent
disturbance growth rate is expressed in terms of upward and northward
fluxes of heat and momentum, and an explanation for the shortwave cutoff in
the model is proposed.
 The simulation with the high-resolution PBL physics is able to
resolve several realistic features including (1) a narrow updraft at the
top of the PBL above the sea-level pressure trough at the warm edge of the
frontal zone; (2) a stable layer capping the PBL to the rear of the frontal
zone; and (3) slightly unstable or neutral lapse rates in the PBL behind
the front and stable lapse rates in the PBL ahead of the front. A
diagnostic analysis of the frontogenesis indicates that the fine structure
resulting from adding PBL physics can be attributed to the frictionally

driven, ageostrophic inflow in the PBL toward the surface pressure trough in which the frontal zone is located. A finding of particular interest is that the stability patterns in the PBL on either side of the front evolve independently of sensible heating through the lower boundary.

The results of this investigation suggest two hypotheses: The first relates the orientation of cloud bands associated with low-level frontal zones to the frontogenetical mechanisms of horizontal shear and confluence. The second is concerned with explaining the structure and evolution of several atmospheric circulation systems in terms of adjustment processes toward equilibrium configurations between the mass and wind fields.

38/5/12   (Item 1 from file: 2)
DIALOG(R)File   2:INSPEC
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4904863   INSPEC Abstract Number: C9504-4230M-053
 Title: **Simulation of a tree structure interconnection network**
  Author(s): Vakilzadian, H.; Sharif, H.
  Author Affiliation: Dept. of Electr. Eng., Nebraska Univ., Lincoln, NE, USA
  p.960-4
  Editor(s): Pace, D.K.; Fayek, A.-M.
  Publisher: SCS, San Diego, CA, USA
  Publication Date: 1994   Country of Publication: USA   xix+972 pp.
  Conference   Title: Proceedings   of   1994   Summer   Computer   Simulation Conference
  Conference Sponsor: SCS
  Conference Date: 18-20 July 1994   Conference Location: San Diego, CA, USA
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Practical (P); Theoretical (T)
  Abstract: A simulation study of a tree-structured interconnection network suitable for connecting an array of processors and memory modules (nodes) is   presented.   The   links interconnecting the nodes are high-speed bi-directional **serial**   **links** . A network of switches is used to connect the links to the processors and memory modules. The inner **column** of switches are connected point-to-point (in a mesh), whereas the outer **columns**   are connected in a binary tree topology. This paper describes a simulation study of the performance of this network. The results have been compared   against   a   mesh-type   (fully   interconnected)   network   for cost-effectiveness and link utilization. (6 Refs)
  Subfile: C
  Descriptors: multiprocessor interconnection networks; performance evaluation; switched networks; trees (mathematics); virtual machines
  Identifiers: tree-structured interconnection network; simulation; **processor**   **array** ; memory module array; high-speed bidirectional **serial links** ; switch network; point-to-point connection; binary tree topology; network performance; mesh-type network; fully interconnected network; cost-effectiveness; link utilization
  Class Codes: C4230M (Multiprocessor interconnection); C7430 (Computer engineering); C5670 (Network performance); C5470 (Performance evaluation and testing)
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38/5/13   (Item 2 from file: 2)
DIALOG(R)File   2:INSPEC
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9

00822397   INSPEC Abstract Number: C75025988
 Title: Mixed mode arithmetic for STARAN
  Author(s): Stabler, E.P.
  Author Affiliation: Dept. of Electrical & Computer Engng., Syracuse
Univ., Syracuse, NY, USA
  Conference Title: Parallel Processing   p.228-9
  Editor(s): Feng, T.
  Publisher: Springer-Verlag, Berlin, West Germany
  Publication Date: 1975 Country of Publication: West Germany   vi+433
pp.
  ISBN: 3 540 07135 0
  Conference Date: 20-23 Aug. 1974   Conference Location: Raquette Lake,
NY, USA
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Applications (A); Practical (P); Theoretical (T)
  Abstract: The array memory of STARAN can provide data to the arithmetic
processing equipment in **bit serial mode** , word **mode** or mixed mode.
In the mixed mode system analysed here the memory provides 32 words of 32
bits for parallel processing. It is different from the **normal** bit **mode**
 operation for STARAN in which the system processes a **single bit** of
each of the 1024 data words at a given moment. The STARAN system analysed
here has an array memory size of 1024*1024 bits, which is segmented into 4
subarrays of 256*1024. (0 Refs)
  Subfile: C
  Descriptors: digital arithmetic; parallel processing
  Identifiers: arithmetic processing; **bit serial mode** ; word mode;
mixed mode; parallel processing; STARAN processor; mixed mode arithmetic
  Class Codes: C5230 (Digital arithmetic methods); C5400 (Analogue and
digital computers and systems)

 38/5/14   (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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04485697   JICST ACCESSION NUMBER: 00A0170902 FILE SEGMENT: JICST-E
**Phase Characterization and Thermal Conductivity of Carbon Alloys Obtained
    by Interface Reaction between C/C Composites and Pressed Molybdenum
    Silicide.**
YAMAMOTO OSAMU (1); SUGANO KAZUYUKI (1); SASAMOTO TADASHI (1); OTA NAOTO
    (2); SOGABE TOSHIAKI (2)
(1) Kanagawa Inst. of Technology; (2) Toyo Tanso Co., Ltd.
Tanso, 1999, NO.190, PAGE.246-251, FIG.5, TBL.2, REF.14
JOURNAL NUMBER: G0633AAG   ISSN NO: 0371-5345   CODEN: TASOA
UNIVERSAL DECIMAL CLASSIFICATION: 661.66
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication
ABSTRACT: The C/C composites made by laying up the sheets of carbon fibers
    using a pitch matrix were used as starting materials. After cutting the
    composites in the parallel (PA) and the **perpendicular** (**PE**)
    directions to the sheets of carbon fibers, the surface of PA and **PE**
    substrates obtained were reacted with $MoSi_2$ at 1450.DEG.C. in argon
    gas. From XRD measurements, the four phases of graphite, $MoSi_2$, MoO_3
    and .ALPHA.-SiC were observed at the surface of the substrates treating
    for 3 and 6h, irrespective of the direction to carbon fiber sheets. A
    concentration gradient of SiC in the as-prepared substrates was
    observed in both directions parallel and **perpendicular** ; the
    concentration of SiC decreases along the depth from the surface of

substrate. In the results of line analysis by EDX measurements, it was
found that the reaction between C/C substrates and MoSi2 occurred in
the portion of matrix in the substrates. The thermal conductivity of PA
substrates decreased with the increase of the treating time and was
lower than that of PA substrate without treatment. However, the thermal
conductivity of the **PE** substrates treating for 6h was higher than
that of the PA substrates treating below 3h and without treatment.
(author abst.)
DESCRIPTORS: carbon-carbon composites; molybdenum silicide; thermal
conductivity; thermochemical reaction; micro structure; carbon fiber;
fabric; **vertical** direction; **horizontal** ; surface reaction;
interface(surface); nuclear fusion reactor wall; temperature dependence
; silicon carbide
BROADER DESCRIPTORS: composite material; material; silicide; silicon
compound; carbon group element compound; molybdenum compound; 6A group
element compound; transition metal compound; heat transmission
coefficient; coefficient; ratio; transport coefficient; chemical
reaction; structure; carbon material; inorganic material; inorganic man
made fiber; man-made fiber; fiber; high temperature fiber; textile
product; product; direction; heterogeneous reaction; face; furnace wall
; wall; furnace component; dependence; carbide; carbon compound
CLASSIFICATION CODE(S): YB02060D

38/5/15   (Item 2 from file: 94)
DIALOG(R)File   94:JICST-EPlus
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03622370   JICST ACCESSION NUMBER: 98A0653584   FILE SEGMENT: JICST-E
A Linear Synchronous Motor and Position Sensorless Control for Horizontal
and Vertical **Consecutive Transport.**
OSAWA HIROSHI (1); WATANABE TOSHIHARU (1)
(1) Fuji Electr. Corp. Res. & Dev. Ltd.
Denki Gakkai Kinzoku Sangyo Kenkyukai Shiryo, 1998, VOL.MID-98,NO.11-16,
PAGE.13-19, FIG.12, TBL.2, REF.7
JOURNAL NUMBER: X0770AAD
UNIVERSAL DECIMAL CLASSIFICATION: 621.867   621.313.13   62-531
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication
ABSTRACT: As the verification model of the big depth transport system by
linear synchronous motor(LSM), the authors developed the experimental
equipment of 3000N driving force. The LSM drive system consists of ten
armatures and two inverters. The carriage can move between the
horizontal track and the **vertical** track **consecutively** , by
connecting both tracks with the curvilinear armature. At this
equipment, position sensors are installed only on the **straight line**
parts, and position sensor less control is performed on the curvilinear
parts. Good characteristics have been confirmed by the eigenvalue
analysis and the experiment. (author abst.)
DESCRIPTORS: linear motor; synchronous motor; elevating conveyor; trolley
conveyor; position control; speed control; inverter fed motor drive;
position sensor; running performance; armature
BROADER DESCRIPTORS: motor; electric machine; machinery; electric power
equipment; AC motor; AC machine; synchronous machine; conveyor;
transporting machine; chain conveyor; control; drive; operation and
driving; electric power equipment operation; operation(processing);
sensor; instrumentation element; performance
CLASSIFICATION CODE(S): QE01030Q; NB07030U; IC03030Q

38/5/16   **(Item 1 from file: 6)**
DIALOG(R)File   6:NTIS

1797412 NTIS Accession Number: N94-22901/0
  **Conception d'Architectures Integrees de Traitement d'Image de Bas Niveau
(Design of Integrated Architectures for Low Level Image Processing)**
  (Ph.D. Thesis)
  Boubekeur, A.
  Institut National Polytechnique de Grenoble (France).
  Corp. Source Codes: 039436000; II427835
  Report No.: ETN-94-95183
  1992   177p
  Languages: French   Document Type: Thesis
  Journal Announcement: GRAI9412; STAR3206
  Text in French.
  Order this product from NTIS by: phone at 1-800-553-NTIS (U.S.
customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
  NTIS Prices: PC A09/MF A02
  Country of Publication: France
  Methods and tools for the design of massively parallel low level image
processing integrated systems are presented. The design of a programmable
two dimensional array of 6720 **single   bit** Processors (**PE** 's)
implemented on a wafer is addressed. Two level defect tolerance techniques
were used. At a subsystem level, a spare **column** is provided to replace
defective **PE** 's. At the wafer level, an original switching network
(externally controlled) is used to bypass defective subarrays. A high level
synthesis tool is used to synthesize automatically from a behavioral
specifications a dedicated array from a specific application. Resources in
terms of registers, connections (multiplexers), and memory points are
minimized.
  Descriptors: *Architecture (Computers); *Image processing; *Integrated
circuits; Central processing units; Fault tolerance; Simd (Computers);
Switching theory; Wafers
  Identifiers: *Foreign technology; Theses; NTISNASAE
  Section Headings: 62F   (Computers, Control, and Information
Theory--Pattern Recognition and Image Processing); 62A (Computers, Control,
and Information Theory--Computer Hardware)

38/5/17   **(Item 2 from file: 6)**
DIALOG(R)File   6:NTIS

1333155 NTIS Accession Number: N87-29135/7
  Supercomputing on Massively Parallel Bit - Serial **Architectures**
  Iobst, K.
  National Aeronautics and Space Administration, Washington, DC.
  Corp. Source Codes: 011249000; NC452981
  Aug 85   22p
  Languages: English
  Journal Announcement: GRAI8801; STAR2523
  In Its Proceedings: Computer Science and Data Systems Technical
Symposium, v1 22p.
  NTIS Prices: (Order as N87-29124/1, PC A16/MF A01)
  Country of Publication: United States
  Research on the Goodyear **Massively   Parallel   Processor** (**MPP**)
suggests that high-level parallel languages are practical and can be

designed with powerful new semantics that allow algorithms to be efficiently mapped to the real machines. For the **MPP** these semantics include parallel/associative array selection for both dense and sparse matrices, variable precision arithmetic to trade accuracy for speed, micro-pipelined train broadcast, and conditional branching at the processing element (**PE**) control unit level. The preliminary design of a FORTRAN-like parallel language for the **MPP** has been completed and is being used to write programs to perform sparse matrix array selection, min/max search, matrix multiplication, Gaussian elimination on **single bit** arrays and other generic algorithms. A description is given of the **MPP** design. Features of the system and its operation are illustrated in the form of charts and diagrams.
   Descriptors: *Architecture (Computers); *High level languages; *Parallel computers; Algorithms; Design analysis; Matrices (Mathematics); Semantics
   Identifiers: Supercomputers; NTISNASA
   Section Headings: 62B (Computers, Control, and Information Theory--Computer Software); 62A (Computers, Control, and Information Theory--Computer Hardware)

   38/5/18   (Item 3 from file: 6)
DIALOG(R)File   6:NTIS
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1306330 NTIS Accession Number: AD-A180 509/2
   Numerical Studies of Frontal Dynamics
   (Final rept. 1 Nov 83-30 Nov 86)
   Keyser, D.
   National Aeronautics and Space Administration, Greenbelt, MD. Goddard Space Flight Center.
   Corp. Source Codes: 013129001; 156200
   Sponsor: Air Force Office of Scientific Research, Bolling AFB, DC.
   Report No.: AFOSR-TR-87-0685
   31 Dec 86   13p
   Languages: English
   Journal Announcement: GRAI8717
   Sponsored in part by Grants AFOSR-ISSA-85-0008 and AFOSR-ISSA-86-0019.
   Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
   NTIS Prices: PC A02/MF A01
   Country of Publication: United States
   Contract No.: AFOSR-ISSA-84-0012; AFOSR-ISSA-85-0077; 2310; A1
   Efforts concentrated on the development of a two dimensional primitive equation (**PE**) model of frontogenesis that simultaneously incorporates the frontagenetical mechanisms of confluence and **horizontal** shear. Applying this **model** to study the effects of upper level frontogenesis, it appeared to be dominated by tilting effects associated with cross front variation of vertical motion, in which subsidence is maximized within and to the warm side of the frontal zone. Results suggest that aspects characteristics of three-dimensional barolinic waves may be abstracted to a significant extent in a two dimensional framework. They also show that upper-level frontogenesis and tropopause folding can occur in the absence of three-dimensional curvature effects, commonly believed to be necessary for realistic upper-level frontogenesis. An implication of the dominant tilting effects is that they may have to be adequately resolved by numerical weather prediction **models** , thus requiring better **horizontal** and vertical resolution. Keywords: Frontogenesis; Primitive equation model; Tilting; Confluence; Shear.
   Descriptors: Fronts(Meteorology); Equations; Horizontal orientation;

Shear properties; Numerical analysis; Curvature; Three dimensional; Folding
; Tropopause; Mathematical models; Confluence; Weather forecasting; Tilt;
Motion; **Vertical** orientation; Atmosphere **models**
    Identifiers: Frontogenesis; Primitive equation models; NTISDODXA;
NTISDODAF
    Section Headings: 55C (Atmospheric Sciences--Meteorological Data
Collection, Analysis, and Weather Forecasting); 55B (Atmospheric
Sciences--Dynamic Meteorology)

    38/5/19   (Item 4 from file: 6)
DIALOG(R)File   6:NTIS
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1293106 NTIS Accession Number: DE87002403
    **Renovation of Dilute Process Wastewaters: Mini-Pilot Plant Evaluation of
an Integrated Process System to Meet the Clean Water Act's Heavy-Metal and
Organic Treatment Requirements at Oak Ridge National Laboratory**
    Begovich, J. M. ; Brown, C. H. ; Villiers-Fisher, J. F. ; Thompson, W. T.
; Patrick, G. C.
    Oak Ridge National Lab., TN.
    Corp. Source Codes: 021310000; 4832000
    Sponsor: Martin Marietta Energy Systems, Inc., Oak Ridge, TN.;
Engineering-Science, Inc., Atlanta, GA.; Department of Energy, Washington,
DC.
    Report No.: CONF-861066-1
    1986   13p
    Languages: English   Document Type: Conference proceeding
    Journal Announcement: GRAI8712; NSA1200
    47. international water conference, Pittsburgh, PA, USA, 27 Oct 1986.
    Portions of this document are illegible in microfiche products. Order
this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers);
(703)605-6000 (other countries); fax at (703)321-8547; and email at
orders@ntis.fedworld.gov.   NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
    NTIS Prices: PC A02/MF A01
    Country of Publication: United States
    Contract No.: AC05-84OR21400
    The purpose of the facility was to simulate the treatment the ORNL
nonradiological wastewaters will receive in the NRWT plant. In the **MPP** ,
all wastewaters, with the exception of those not containing heavy metals
(i.e., Cd, Cr, Cu, Fe, Pb, Hg, Ni, Ag, and Zn), flowed through an API-type
separator. The criteria metals (except for mercury) were removed in the
reactor/clarifier (R/C) as hydroxide precipitates using either calcium
hydroxide (lime) and sodium carbonate (soda ash) or sodium hydroxide
(caustic). Overflow from the precipitator was then treated by dual-media
(sand and anthracite) filters and adjusted to a pH of 7. Wastewaters that
had been pretreated by ion exchange for radionuclide removal bypassed the
first four unit operations and were combined with the other wastewaters
prior to air stripping. Volatile organics were removed by air stripping in
a packed tower, while heavy (nonvolatile) organics and mercury were removed
in three **serially   connected** GAC **columns** . An ion-exchange (IX) **column**
was operated in parallel with the R/C in order to evaluate the long-term
performance of a chelating, heavy-metal-selective resin. In general,
results of the **MPP** studies correlated well with those of the bench-scale
treatability studies. The remainder of this paper details: the results of
selected bench-scale treatability studies; spiking of feed streams; the
MPP flowsheet and description of equipment; the results from the two **MPP**
campaigns; and finally, the conclusions formulated by this treatability
work. (ERA citation 12:012343)
    Descriptors: *ORNL; *Waste Water; Chemical Effluents; Clean Water Act;

Compliance; Liquid Wastes; Organic Compounds; Waste Management
   Identifiers: *Water pollution control; *Heavy metals; *Waste treatment;
ERDA/520600; ERDA/520500; NTISDE
   Section Headings: 68D (Environmental Pollution and Control--Water
Pollution and Control)

   38/5/20   (Item 5 from file: 6)
DIALOG(R)File   6:NTIS
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1045514 NTIS Accession Number: N83-25378/1
   Massively   Parallel   Processor   **Computer**
   (Patent)
   Fung, L. W.
   National Aeronautics and Space Administration, Greenbelt, MD. Goddard
Space Flight Center.
   Corp. Source Codes: 013129001; NC999967
   Report No.: PATENT-4 380 046; PAT-APPL-6-041 143,NASA-CASE-GSC-12223-1
   Filed 21 May 79 patented 12 Apr 83   15p
   Languages: English   Document Type: Patent
   Journal Announcement: GRAI8320; STAR2114
   Supersedes PAT-APPL-6-041 143, N79-27864 (17 - 18, p 2462).
   This Government-owned invention available for U.S. licensing and,
possibly, for foreign licensing. Copy of patent available Commissioner of
Patents, Washington, DC 20231, $1.00.
   NTIS Prices: Not available NTIS
   Country of Publication: United States
   An apparatus for processing multidimensional data with strong spatial
characteristics, such as raw image data, characterized by a large number of
parallel data streams in an ordered array is described. It comprises a
large number (e.g., 16,384 in a 128 x 128 array) of parallel processing
elements operating simultaneously and independently on **single   bit**
slices of a corresponding array of incoming data streams under control of a
single set of instructions. Each of the processing elements comprises a
bidirectional data bus in communication with a register for storing
single   bit slices together with a random access memory unit and
associated circuitry, including a binary counter/shift register device, for
performing logical and arithmetical computations on the bit slices, and an
I/O unit for interfacing the **bidirectional** data bus with the data stream
source. The **massively   parallel   processor** architecture enables very
high speed processing of large amounts of ordered parallel data, including
spatial translation by shifting or sliding of bits **vertically** or
horizontally to neighboring processing elements.
   Descriptors: *Patents; *Architecture (Computers); *Computer design;
*Parallel processing (Computers); Airborne/spaceborne computers; Image
processing; Logical elements; Random access memory; Shift registers
   Identifiers: PAT-CL-364-200; NTISGPNASA
   Section Headings: 62A (Computers, Control, and Information
Theory--Computer Hardware); 62B (Computers, Control, and Information
Theory--Computer Software)

   38/5/21   (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
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   15193619   PASCAL No.: 01-0358816
   Combined convective flow over a horizontal **cylinder in a porous medium**
near a vertical **impermeable surface**
   3rd European thermal sciences conference : Heidelberg, 10-13 September

15

2000
OOSTHUIZEN Patrick H
HAHNE EWP, ed; HEIDEMANN W, ed; SPINDLER K, ed
HEAT TRANSFER LABORATORY, Department of Mechanical Engineering, Queen's
University, Kingston, Ontario, K7L 3N6, Canada
European thermal sciences conference, 3 (Heidelberg DEU) 2000-09-10
2000 473-478
Publisher: ETS, Pisa
ISBN: 88-467-0305-7 Availability: INIST-Y 33303; 354000092405250730
No. of Refs.: 17 ref.
Document Type: C (Conference Proceedings) ; A (Analytic)
Country of Publication: Italy
Language: English

A numerical study of laminar, two-dimensional combined (or mixed)
convective flow over a circular cylinder embedded in a saturated porous
medium has been numerically studied. The axis of a cylinder is in a
horizontal plane and is arranged at right angles to the oncoming
vertical forced flow. The cylinder is heated to a uniform surface
temperature which is higher or lower than that of the fluid in the forced
flow ahead of the cylinder. There is a **vertical** impermeable surface near
the cylinder. This surface is at the temperature of liquid flowing over the
cylinder. The study is based on the Darcy type assumptions with the
buoyancy terms being treated using the Boussinesq approximation. The
governing equations, written in dimensionless form, have been solved using
the finite element method. The solution has as parameters the dimensionless
distance, H, of the cylinder from the impermeable surface, the Peclet
number, **Pe** , a buoyancy parameter, B, and depends on whether the buoyancy
forces act in the same or in the **opposite direction** to the direction of
the forced flow (i.e. on whether there is assisting or opposing flow).
Results have been obtained for a range of values of the parameters for both
assisting and opposing flows. The results indicate that the distance of the
cylinder from the surface only has an effect on the heat transfer rate from
the cylinder when the cylinder is very close to the surface or when the
Peclet number is low.

English Descriptors: **Horizontal** cylinder; Buried pipe; Convection flow;
   Porous medium; Heat transfer; Nusselt number; Modeling

French Descriptors: Cylindre **horizontal** ; Canalisation enterree;
   Ecoulement convection; Milieu poreux; Transfert chaleur; Nombre Nusselt;
   Modelisation

Classification Codes: 001D06D02B; 230

38/5/22   (Item 2 from file: 144)
DIALOG(R)File 144:Pascal

12610341   PASCAL No.: 96-0298618
**Circulation in the Alboran Sea as determined by quasi-synoptic
hydrographic observations. Part II: Mesoscale ageostrophic motion diagnosed
through density dynamical assimilation**
VIUDEZ A; HANEY R L; TINTORE J
Departament de Fisica, Universitat de les Illes Balears, Palma de
Mallorca, Spain
Journal: Journal of physical oceanography, 1996, 26 (5) 706-724
ISSN: 0022-3670 CODEN: JPYOBT Availability: INIST-15148;

354000043676380040
  No. of Refs.: 1 p.
  Document Type: P (Serial) ; A (Analytic)
  Country of Publication: United States
  Language: English
  The 3D velocity field in the Alboran Sea (Western Mediterranean) is
diagnosed through density dynamical assimilation in a primitive equation (
 PE) model with mesoscale resolution. The ageostrophic motion is computed
from fields produced by short-term backward and forward integrations of the
 PE model initialized with quasisynoptic CTD data. A weight function based
on a low-pass digital filter (Digital Filter Initialization method) is
applied to the resulting time series of model variables to obtain the
final, dynamically balanced, density and 3D velocity fields. The diagnosed
ageostrophic motion is interpreted by comparing the **vertical** velocity
field with that obtained from the quasigeostrophic (QG) omega equation. The
two methods produce very similar results with maximum **vertical** motions in
the range of 10-20 m d SUP - SUP 1 associated with the differential
advection of relative vorticity in small-scale jet meanders (upward
(downward) motion upstream (downstream) of the ridges). Small local
differences between **PE** and QG **vertical** velocities (typically 1-2 m d
SUP - SUP 1) are attributed to known limitations of the QG theory and to
differences between the analyzed and the dynamically initialized density
fields. The **horizontal** ageostrophic motion in the western Alboran gyre
(WAG) is in the same direction as the geostrophic motion above 100 m but in
the **opposite direction** below 100 m. While the **horizontal** ageostrophic
motion in the WAG can imply inflow or outflow depending on the position of
local meanders, the gyre-scale ageostrophic circulation is characterized by
convergence above 100 m and divergence below 100 m, implying an average
downward motion of less than 1 m d SUP - SUP 1 . The general success of
this assimilation approach could provide an alternative to QG diagnosis in
mesoscale dynamics.

English Descriptors: Sea circulation; Data assimilation; Mesoscale; Three
   dimensional structure; Weight function; Digital filter; Time series;
   Density; Velocity distribution; Vortex motion; Alboran Sea; Advection;
   Vorticity; **Vertical** speed; Jet(atmosphere, ocean); Meander; **Vertical**
   motion
Broad Descriptors: Mediterranean Sea; Mer Mediterranee; Mar Mediterraneo

French Descriptors: Circulation marine; Assimilation donnee; Mesoechelle;
   Structure 3 dimensions; Fonction poids; Filtre numerique; Serie
   temporelle; Densite; Distribution vitesse; Mouvement tourbillon; Mer
   d'Alboran; Advection; Vorticite; Vitesse **verticale** ; Jet(atmosphere,
   ocean); Meandre; Mouvement **vertical**

Classification Codes: 001E02B05

 38/5/23   (Item 1 from file: 434)
DIALOG(R)File 434:SciSearch(R) Cited Ref Sci
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08334531   Genuine Article#: K0672   Number of References: 19
Title: **A PARALLEL IMAGE SEGMENTATION ALGORITHM USING RELAXATION WITH
   VARYING NEIGHBORHOODS AND ITS MAPPING TO ARRAY PROCESSORS**
Author(s): DERIN H; WON CS
Corporate Source: UNIV MASSACHUSETTS,DEPT ELECT & COMP
   ENGN/AMHERST//MA/01003
Journal: COMPUTER VISION GRAPHICS AND IMAGE PROCESSING, 1987, V40, N1, P
   54-78

Language: ENGLISH   Document Type: ARTICLE
Geographic Location: USA
Subfile: SciSearch; CC ENGI--Current Contents, Engineering, Technology &
    Applied Sciences
Journal Subject Category: COMPUTER APPLICATIONS & CYBERNETICS
Research Fronts: 86-8118 002   (DIGITAL ELEVATION MODELS; NOISY IMAGES;
    IMAGE-PROCESSING METHOD; IMAGE-ANALYSIS TECHNIQUES)
  86-0032 001   (LONG-RANGE ISING SPIN-GLASSES; SPIN-GLASS TRANSITION; SK
    MODEL; DYNAMIC MEAN-FIELD THEORY; DZYALOSHINSKY-MORIYA ANISOTROPY IN
    REENTRANT ALLOYS)
  86-0341 001   (PARALLEL PROCESSING; ROW-ORDERING SCHEMES FOR SPARSE
    GIVENS TRANSFORMATIONS; SYSTOLIC ARRAYS; QR FACTORIZATION; VLSI
    ALGORITHMS; HIGH-PERFORMANCE COMPUTERS)
  86-1793 001   (PARALLEL PROCESSING SYSTEMS; INTERCONNECTION NETWORKS;
    VLSI ALGORITHM; MESH-CONNECTED **PROCESSOR   ARRAY** ; DUAL SYSTOLIC
    ARCHITECTURES; PERFORMANCE ANALYSIS)
  86-1887 001   (INCOMPLETE BLOCK-DESIGNS; EFFICIENCY FACTORS; **ROW –
    COLUMN** DESIGNS; VARIANCE **MODEL** ; FIELD EXPERIMENTS)
Cited References:
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    YASNOFF WA, 1977, V9, P217, PATTERN RECOGNITION

  38/5/24   (Item 2 from file: 434)
DIALOG(R)File 434:SciSearch(R) Cited Ref Sci
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07595683   Genuine Article#: E5212   Number of References: 150
Title: A SURVEY OF STEPPING-STONE MODELS IN POPULATION-DYNAMICS
Author(s): RENSHAW E
Corporate Source: UNIV EDINBURGH,DEPT STAT,KINGS BLDG,MAYFIELD RD/EDINBURGH
    EH9 3JZ/MIDLOTHIAN/SCOTLAND/
Journal: ADVANCES IN APPLIED PROBABILITY, 1986, V18, N3, P581-627
Language: ENGLISH   Document Type: REVIEW, BIBLIOGRAPHY
Geographic Location: SCOTLAND
Subfile: SciSearch; CC PHYS--Current Contents, Physical, Chemical & Earth
    Sciences
Journal Subject Category: STATISTICS & PROBABILITY
Research Fronts: 86-1178 004   (STATISTICAL DISTRIBUTION; SEQUENTIAL
    SAMPLING PLAN; CEREAL APHID POPULATIONS; SPATIAL PATTERN; FIELD CORN;
    DISPERSION PATTERNS)
  86-5979 003   (CELL-CYCLE CONTROLS; DYNAMICS IN HIERARCHICALLY ORGANIZED
    SYSTEMS; NUCLEAR GROWTH DURING G1)
  86-6825 003   (OPEN NETWORKS OF QUEUES; TELEPHONE NETWORK PERFORMANCE;

CLOSED QUEUING-NETWORKS; TANDEM CONFIGURATIONS; AGES OF ALLELES)
86-7933 002   (STRUCTURED POPULATIONS; BOUNDARY DYNAMICS; STEPPING-STONE
    MODELS IN POPULATION-DYNAMICS)
86-0564 001   (GENETIC DIFFERENTIATION; ELECTROPHORETIC ANALYSIS;
    BIOCHEMICAL SYSTEMATICS; GENETIC-VARIATION IN ALLOZYMES;
    GENETIC-DIVERGENCE AMONG POPULATIONS)
86-1300 001   (SUPERCRITICAL GALTON-WATSON PROCESS; BRANCHING-PROCESS
    MODEL; TIME RESPONSE OF THE STAIRCASE AVALANCHE PHOTODIODE; ASYMPTOTIC
    PROPERTIES)
86-1793 001   (PARALLEL PROCESSING SYSTEMS; INTERCONNECTION NETWORKS;
    VLSI ALGORITHM; MESH-CONNECTED **PROCESSOR   ARRAY** ; DUAL SYSTOLIC
    ARCHITECTURES; PERFORMANCE ANALYSIS)
86-1887 001   (INCOMPLETE BLOCK-DESIGNS; EFFICIENCY FACTORS; **ROW** –
    COLUMN DESIGNS; VARIANCE **MODEL** ; FIELD EXPERIMENTS)
86-2434 001   (SPECIES AREA RELATIONSHIPS; ISLAND BIOGEOGRAPHY; INSULAR
    SMALL MAMMALS; RARITY IN PLANTS; HABITAT HETEROGENEITY; FOREST BIRDS;
    BIRD COMMUNITIES)
86-2767 001   (BROWNIAN EXCURSIONS; COMPLEX BROWNIAN-MOTION; PERCOLATION
    IN RANDOM-FIELDS; ONE-DIMENSIONAL DIFFUSIONS; MULTIPLE POINTS; 2
    INTERACTING SYSTEMS)
86-3428 001   (INTRACELLULAR PATTERN REVERSAL; CHICK LIMB BUDS;
    MECHANICAL MODEL FOR BIOLOGICAL PATTERN-FORMATION; POSITIONAL SYSTEM;
    CELL PATTERNING; EARLY DEVELOPMENT)
86-4203 001   (SPATIAL MODELS; RANDOM ASSOCIATION; DISEASE SEVERITY DATA)

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38/5/25   (Item 1 from file: 34)

07255046   Genuine Article#: 142VC   Number of References: 17
Title: An efficient method for approximating submesh reliability of

two-dimensional meshes
Author(s): Chang CY (REPRINT) ; Mohapatra P
Corporate Source: AMDAHL CORP,1250 E ARQUES AVE/SUNNYVALE//CA/94088
    (REPRINT); IOWA STATE UNIV SCI & TECHNOL,DEPT ELECT & COMP
    ENGN/AMES//IA/50011
Journal: IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS, 1998, V9,
    N11 (NOV), P1115-1124
ISSN: 1045-9219   Publication date: 19981100
Publisher: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC, 345 E 47TH ST,
    NEW YORK, NY 10017-2394
Language: English   Document Type: ARTICLE
Geographic Location: USA
Subfile: CC ENGI--Current Contents, Engineering, Computing & Technology
Journal Subject Category: ENGINEERING, ELECTRICAL & ELECTRONIC; COMPUTER
    SCIENCE, THEORY & METHODS

Abstract: An analytical model for submesh reliability of mesh-connected
    systems is proposed in this paper. A mesh is considered operational as
    long as a functional submesh of the required size is available. We use
    the principle of inclusion and exclusion to find the exact probability
    of having a functional submesh within a partition of the mesh. The
    partitions are taken along either dimension of the mesh. The partitions
    along the rows are called row partitions (RPs) and along the columns
    are called column partitions (CPs). The reliability of a partition is
    then used to approximate the submesh reliability of the system and,
    thus, this model is called partitioned mesh (PM) model. Instead of
    using a computationally intensive recursive algorithm as done in the
    previous work, a closed form approximation of the submesh reliability
    is derived in this paper. The PM model is validated through simulation
    and compared with the earlier proposed approximation techniques. It is
    shown that the PM model provides better approximations for submesh
    reliability with constant computational complexity.
Descriptors--Author Keywords: **column** partition ; partitioned mesh **model**
    ; **row** partition ; submesh reliability ; two-dimensional mesh
Identifiers--KeyWord Plus(R): **PROCESSOR   ARRAYS** ; ALLOCATION
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38/5/26   (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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03435126   Genuine Article#: PD793   Number of References: 42
**Title: A HIGHLY OR-PARALLEL INFERENCE MACHINE (MULTI-ASCA) AND ITS
    PERFORMANCE EVALUATION - AN ARCHITECTURE AND ITS LOAD BALANCING**

ALGORITHMS

Author(s): NAGANUMA J; OGURA T
Corporate Source: NIPPON TELEGRAPH & TEL PUBL CORP,LSI LABS,3-1 MORINOSATO
    WAKAMIYA/ATSUGI/KANAGAWA 24301/JAPAN/
Abstract: An architecture and its four load balancing algorithms for a
    highly OR-parallel inference machine are proposed, and its performance
    is evaluated in a trace-driven simulation study. This inference
    machine consists of a large number of processing elements (**PE** 's) with
     serial I/O **links** directly connected to each other in a simply
    modified mesh network. Each **PE** is a high-speed sequential Prolog
    processor with its own local memory. The activity of all **PE** 's is
    locally controlled by four new load balancing algorithms based on
    purely local communication. Communication is allowed only between
    directly connected **PE** 's. These load balancing algorithms reduce
    communication overhead in a load balancing and make it possible to
    accomplish highly OR-parallel execution. A software simulator using a
    trace-driven simulation technique based on an inference tree has been
    developed, and some typical OR-parallel benchmarks such as the n-queens
    problem have been simulated on it. The average communication per load
    balancing is reduced by a factor ranging from 1/30 to 1/100 by the
    interaction of these load balancing algorithms as compared with a
    conventional copying method. The inference machine (1024 **PE** 's: 32 x
    32 array) attains 300-600 times parallel speedup, assuming 1 MLIPS
    (mega logical inference per second) **PE** and a 20 MBPS (mega bit per
    second) each **serial** I/O **link** , which could be easily integrated on a
    single chip using current VLSI technology. This highly OR-parallel
    inference machine promises to be an important step towards the
    realization of a high-performance artificial intelligence system.
Descriptors--Author Keywords: HIGHLY PARALLEL INFERENCE MACHINE
    ARCHITECTURE ; LOAD BALANCING ALGORITHMS ; LOGIC PROGRAMMING LANGUAGE ;
    NONSHARED MEMORY MULTIPROCESSOR SYSTEM ; OR-PARALLEL EXECUTION ;
    PERFORMANCE EVALUATION ; PROLOG ; TRACE DRIVEN SIMULATION
Identifiers--KeyWords Plus: PROLOG
Research Fronts: 92-1723 003   (OBJECT-ORIENTED LOGIC PROGRAMMING SYSTEM;
    LINEAR RECURSIVE QUERIES IN DEDUCTIVE DATABASES; ARCHITECTURAL SUPPORT
    FOR GOAL MANAGEMENT)
    92-1105 001   (LOGIC PROGRAMS; QUALITATIVE MODEL-BASED INTELLIGENT
    CONTROL OF A DISTILLATION **COLUMN** ; ABDUCTION IN LEARNING DIAGNOSTIC
    KNOWLEDGE)

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38/5/27   (Item 3 from file: 34)

02665656   Genuine Article#: LV291   Number of References: 30

Title: **NUCLEAR-MAGNETIC-RESONANCE IMAGING OF MISCIBLE FINGERING IN POROUS-MEDIA**

Author(s): PEARL Z; MAGARITZ M; BENDEL P
Corporate Source: WEIZMANN INST SCI,DEPT ENVIRONM SCI & ENERGY RES/IL-76100
    REHOVOT//ISRAEL/; WEIZMANN INST SCI,DEPT CHEM PHYS/IL-76100
    REHOVOT//ISRAEL/

Abstract: Nuclear Magnetic Resonance Imaging (MRI) can noninvasively map
    the spatial distribution of Nuclear Magnetic Resonance (NMR)-sensitive
    nuclei. This can be utilized to investigate the transport of fluids
    (and solute molecules) in three-dimensional model systems. In this
    study, MRI was applied to the buoyancy-driven transport of aqueous
    solutions, across an unstable interface in a three-dimensional box
    model in the limit of a small Peclet number (Pe <0.4). It is
    demonstrated that MRI is capable of distinguishing between convective
    transport ('fingering') and molecular diffusion and is able to quantify
    these processes. The results indicate that for homogeneous porous
    media, the total fluid volume displaced through the interface and the
    amplitude of the fastest growing finger are linearly correlated with

time. These linear relations yielded mean and maximal displacement
velocities which are related by a constant dimensionless value
(2.4+/-0.1). The mean displacement velocity (U) allows us to calculate
the media permeability which was consistent between experiments
(1.4+/-0.1 x 10(-7) cm2). U is linearly correlated with the initial
density gradient, as predicted by theory. An extrapolation of the
density gradient to zero velocity enables an approximate determination
of the critical density gradient for the onset of instability in our
system (0.9+/-0.3 x 10(-3) g/cm3), a value consistent with the value
predicted by a calculation based upon the modified Rayleigh number.
These results suggest that MRI can be used to study complex fluid
patterns in three-dimensional box models, offering a greater
flexibility for the simulation of natural conditions than conventional
experimental modelling methods.
Descriptors--Author Keywords: NUCLEAR MAGNETIC RESONANCE IMAGING (MRI) ;
    MISCIBLE DISPLACEMENT ; BUOYANCY ; 3-DIMENSIONAL ; DIFFUSION ;
    PERMEABILITY
Identifiers--KeyWords Plus: WATER; DIFFUSION; FLOW
Research Fronts: 91-2091 001   (SOLUTE TRANSPORT IN GROUNDWATER;
    UNSATURATED FLOW THEORY; SATURATED SOILS)
    91-2355 001   (DIRECTIONAL SOLIDIFICATION; SELF-DILATING VISCOUS FINGERS
    IN WEDGE-SHAPED HELE-SHAW CELLS; CELLULAR GROWTH; PATTERN SELECTION;
    2-DIMENSIONAL INTERFACE)
    91-3996 001   (MIXED CONVECTION IN POROUS-MEDIA; HOT FLUID MIGRATION;
    THERMAL REGIME; HEAT-FLOW **MODELING** ; **HORIZONTAL** PLATE; **VERTICAL**
    SURFACES)
    91-5115 001   (NMR IMAGING OF WATER; NUCLEAR-MAGNETIC-RESONANCE
    MICROSCOPY; STRUCTURE IN CONCENTRATED SUSPENSIONS)
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38/5/28   (Item 4 from file: 34)

02427448   Genuine Article#: LA335   Number of References: 16
Title: MIXED CONVECTION ALONG A NONISOTHERMAL VERTICAL FLAT-PLATE EMBEDDED IN A POROUS-MEDIUM - THE ENTIRE REGIME
Author(s): HSIEH JC; CHEN TS; ARMALY BF
Corporate Source: UNIV MISSOURI,DEPT MECH & AEROSP ENGN & ENGN
    MECH/ROLLA//MO/65401
Journal: INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, 1993, V36, N7 (
    MAY), P1819-1825
ISSN: 0017-9310
Language: ENGLISH   Document Type: ARTICLE
Geographic Location: USA
Subfile: SciSearch; CC ENGI--Current Contents, Engineering, Technology &
    Applied Sciences
Journal Subject Category: MECHANICS; ENGINEERING, MECHANICAL
Abstract: The problem of mixed convection about a vertical flat plate
    embedded in a porous medium is analyzed. Nonsimilarity solutions are
    obtained for the cases of variable wall temperature (VWT) in the form
    $T(w)(x) = T(infinity) + ax(n)$ and variable surface heat flux (VHF) in
    the form $q(w)(x) = bx(m)$. The entire mixed convection regime is covered
    by two different nonsimilarity parameters chi = $[I + (Ra(x)/$ Pe
    $(x))1/2]-1$ and chi* = $[1 + (Ra(x)*/$ Pe $(x)3/2)1/3]-1$, respectively, for
    VWT and VHF cases, from pure forced convection (chi = 1 or chi* = 1) to
    pure free convection (chi = 0 or chi* = 0). A finite-difference scheme
    was used to solve the system of transformed governing equations.
    Velocity and temperature profiles, and local Nusselt numbers are
    presented. It is found that as chi or chi* decreases from 1 to 0, the
    thermal boundary layer thickness increases first and then decreases,
    but the local Nusselt number in the form Nu(x)(Pe $(x)1/2$ + Ra$(x)1/2)-1$
    or Nu(x)(Pe $(x)1/2$ + Ra$(x)*1/3)-1$ decreases first and then increases.
    The correlation equations for the local and average Nusselt numbers are
    also obtained for the two surface heating conditions.
Identifiers--KeyWords Plus: NATURAL-CONVECTION; SIMILARITY TRANSFORMATION;
    SURFACES; CYLINDER; FLOWS
Research Fronts: 91-3996 001   (MIXED CONVECTION IN POROUS-MEDIA; HOT FLUID
    MIGRATION; THERMAL REGIME; HEAT-FLOW **MODELING ; HORIZONTAL** PLATE;
    VERTICAL SURFACES)
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38/5/29   (Item 5 from file: 34)

● ●

02369544   Genuine Article#: KX210   Number of References: 10
**Title: NONSIMILARITY SOLUTIONS FOR MIXED CONVECTION FROM VERTICAL SURFACES
IN POROUS-MEDIA - VARIABLE SURFACE-TEMPERATURE OF HEAT-FLUX**
Author(s): HSIEH JC; CHEN TS; ARMALY BF
Corporate Source: UNIV MISSOURI,DEPT MECH & AEROSP ENGN & ENGN
    MECH/ROLLA//MO/65401
Journal: INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, 1993, V36, N6 (
    APR), P1485-1493
ISSN: 0017-9310
Language: ENGLISH   Document Type: ARTICLE
Geographic Location: USA
Subfile: SciSearch; CC ENGI--Current Contents, Engineering, Technology &
    Applied Sciences
Journal Subject Category: MECHANICS; ENGINEERING, MECHANICAL
Abstract: Nonsimilarity solutions for mixed convection from a vertical flat
    plate embedded in a porous medium are reported for two surface heating
    conditions: variable wall temperature (VWT) and variable surface heat
    flux (VHF) of the power-law form. The entire mixed convection regime is
    divided into two regions. One region covers the forced convection
    dominated regime and the other one covers the free convection dominated
    regime. The governing equations are first transformed into a
    dimensionless form by the nonsimilar transformation and then solved by
    a finite-difference scheme. Four nonsimilarity parameters are
    introduced. The parameters $Ra(x)*/Pe(x)$ and $Ra(x)*/Pe(x)3/2$
    characterize the effect of buoyancy forces on the forced convection for
    the VWT and VHF cases, respectively; while the parameters $Pe(x)/Ra(x)$
    and $Pe(x)/Ra(x)*2/3$ characterize the effect of forced flow on the
    free convection for VWT and VHF cases, respectively. Numerical results
    for both heating conditions are presented. Correlation equations for
    the local and average Nusselt numbers are also presented.
Identifiers--KeyWords Plus: CYLINDER
Research Fronts: 91-3996 001   (MIXED CONVECTION IN POROUS-MEDIA; HOT FLUID
    MIGRATION; THERMAL REGIME; HEAT-FLOW **MODELING ; HORIZONTAL** PLATE;
    VERTICAL SURFACES)
Cited References:
    ALDOSS TK, 1993, V36, P463, INT J HEAT MASS TRAN
    ALDOSS TK, 1993, V36, P471, INT J HEAT MASS TRAN
    CEBECI T, 1977, CH7, MOMENTUM TRANSFER BO
    CHENG P, 1977, V82, P2040, J GEOPHYS RES
    CHENG P, 1981, V8, P261, LETT HEAT MASS TRANS
    CHURCHILL SW, 1977, V23, P10, AICHE J
    HONG JT, 1987, V109, P356, J HEAT TRANS-T ASME
    MINKOWYCZ WJ, 1985, V8, P349, NUMER HEAT TRANSFER
    RANGANATHAN P, 1984, V7, P305, NUMER HEAT TRANSFER
    YUCEL A, 1984, V7, P483, NUMER HEAT TRANSFER

```
Set     Items    Description
S1      33994    MASSIVELY()PARALLEL()PROCESSOR? OR MPP OR PLURALITY()PROCE-
                 SSING()ELEMENT? OR PPE OR PE OR PROCESSOR()(ARRAY? OR ARRANGE-
                 MENT? OR ORDER OR FORMATION)
S2      16451    (SERIAL? OR CONSECUTIVE? OR SUCCESSIVE? OR SEQUENTIAL?)(2N-
                 )(CONNECT? OR LINK?) OR SINGLE()BIT
S3       6608    MODE? (3N) (VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUM-
                 N?)
S4       8999    MODE? (3N) (HORIZONTAL? OR ROW OR NORMAL?)
S5        833    MODE? (3N) (BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DI-
                 RECTION? OR PERPENDICULAR? OR STRAIGHT()LINE)
S6        245    VERTICAL()(MEMORY OR STORE? OR STORAGE OR ROM)
S7     596022    VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUMN?
S8     648941    HORIZONTAL? OR ROW OR NORMAL?
S9      48828    BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DIRECTION? OR -
                 PERPENDICULAR? OR STRAIGHT()LINE
S10         0    S1 (S) S2 (S) S3 (S) S4 (S) S5
S11        25    S1 (S) S2
S12     50360    S1 OR S2
S13         0    S12 (S) S3 (S) S4 (S) S5
S14         5    S12 (S) S3
S15        35    S12 (S) S4
S16         0    S15 (S) S5
S17         0    S12 (S) S6
S18       493    S12 (S) S7
S19       107    S18 (S) S8
S20         1    S19 (S) S9
S21         3    S18 (S) S9
S22         1    S18 (S) S7 (S) S8 (S) S9
S23        43    S14 OR S15 OR S20 OR S21 OR S22
S24        43    S23 NOT PY>2000
S25        43    S24 NOT PD>20000831
S26        32    RD (unique items)
```

File 275:Gale Group Computer DB(TM) 1983-2002/Jul 30
      (c) 2002 The Gale Group
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      (c) 2002 The Gale group
File 75:TGG Management Contents(R) 86-2002/Jul W2
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File 636:Gale Group Newsletter DB(TM) 1987-2002/Jul 30
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      (c) 2002 The Gale Group
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26/3,K/1   (Item 1 from file: 275)
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02083966   SUPPLIER NUMBER: 17800143   (USE FORMAT 7 OR 9 FOR FULL TEXT)
HP DeskJet 850C; HP DeskJet 340. (desktop and portable inkjet printers)
  (Hardware Review)(Evaluation)
Bojorquez, Tony A.
MacUser, v12, n3, p55(2)
March, 1996
DOCUMENT TYPE: Evaluation   ISSN: 0884-0997   LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1221   LINE COUNT: 00102

...   an interruption.
    The DeskJet 850C prints either over a LocalTalk connection--for
network use--or via a **serial   connection** . It's also equipped with a
parallel port, which means you can connect both a Mac and a PC to the
printer simultaneously. For setting print quality, you can choose one of
three print **modes** (Econofast, **Normal** , and Best) with the software. HP's
ColorSmart technology is an added plus--it lets the printer...

26/3,K/2   (Item 2 from file: 275)
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01949302   SUPPLIER NUMBER: 18385311   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Axil's S/420 HyperSPARC server. (Axil Computer Inc file server) (Hardware
  Review)(Evaluation)
Barker, Ralph
UNIX Review, v14, n8, p53(5)
July, 1996
DOCUMENT TYPE: Evaluation   ISSN: 0742-3136   LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 2802   LINE COUNT: 00228

...   controller in the subsystem, along with associated configuration
utilities. Earlier models of the S/420 provide a **serial** communication
link between the main chassis and the RAID subsystem. To configure the
RAID subsystem, the installer uses the...

...RAID level 5 is the desired configuration, the installed disks can be
formatted and mounted in the **normal** manner. Newer **models** of the S/420
provide a utility that configures the subsystem directly via the SCSI bus.
    Documentation...

26/3,K/3   (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01890677   SUPPLIER NUMBER: 17488771   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Internetwork 1995 TCP/IP software directory.(Internetwork
  supplement)(includes company index)(Buyers Guide)
INTERNETWORK, v6, n8, pA1(20)
August, 1995
DOCUMENT TYPE: Buyers Guide   LANGUAGE: English   RECORD TYPE:
  Fulltext; Abstract
WORD COUNT: 14920   LINE COUNT: 01298

1

... terminal. It supports DECnet, TCP/)P, Novell's NCSI communications server protocol, Netware for DEC Access and **serial connections** . A Winsock-compliant FTP client is also included. Advanced features include programmable toolbars, DDE support, 48 line display, 1 32 **column** display, a **modem** dialer, graphical keyboard mapper, command language and Xmodem, Ymodem, Zmodem and sliding windows Kermit file transfer. The...

26/3,K/4   (Item 4 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01826377   SUPPLIER NUMBER: 17372648   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Apple Color StyleWriter 2400 and 2200 and HP DeskWriter 660C: new crop of razzle-dazzle color inkjet printers. (Hardware Review)(Evaluation)
Bojorquez, Tony
MacUser, v11, n10, p49(2)
Oct, 1995
DOCUMENT TYPE: Evaluation   ISSN: 0884-0997   LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1430   LINE COUNT: 00118

...ABSTRACT: DeskWriter 660C uses separate black and three-color ink cartridges and comes with 27 TrueType fonts and **serial** and LocalTalk **connections** . Black text and line art prints at up to 600 by 600 dpi and best-quality color at 600 by 300 dpi; the ' **normal** ' color **mode** is 300 by 300 dpi. Apple's printers are faster than the HP and offer better color...

26/3,K/5   (Item 5 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01690166   SUPPLIER NUMBER: 15560951   (USE FORMAT 7 OR 9 FOR FULL TEXT)
New uses for parallel ports. (Integration Connections)(includes related article on easing CPU load via parallel port modems) (Column)
Kennedy, Randall C.
Windows Sources, v2, n8, p197(2)
August, 1994
DOCUMENT TYPE: Column   ISSN: 1065-9641   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1162   LINE COUNT: 00088

...   bit port that has graced most systems since the early eighties and the more modern, 8-bit **bidirectional** port. The major difference is the number of bits that each type can receive from a communications...

...a time. With either type of parallel port, you'll see an immediate performance boost over traditional, **single - bit serial** ports.
     If parallel ports are so much more efficient, why did it take so long for the...

26/3,K/6   (Item 6 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01687183   SUPPLIER NUMBER: 15510531   (USE FORMAT 7 OR 9 FOR FULL TEXT)
NSA bolsters SuperScan Elite 21-inch monitor. (NSA Hitachi SuperScan Elite 21) (Brief Article)
Bernard, Viki

2

PC Week, v11, n23, p25(1)
June 13, 1994
DOCUMENT TYPE: Brief Article   ISSN: 0740-1604   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 205   LINE COUNT: 00016

...   bandwidth to 160MHz.
        Among several user controls are an RGB color control, an input
terminal selector, a **mode** switch, brightness, contrast, **horizontal**
/vertical position and size, an input terminal selector, and white-balance
selection. Customers control these functions using a **serial** port that
links the monitor and a nine-pin connector on the computer. Software
bundled with the monitor allows users...

26/3,K/7   (Item 7 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01685070   SUPPLIER NUMBER: 15402962   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**DeskJet 560C: HP's spectacular spectrums. (color ink jet printer) (includes
   related article on affordability of printer) (New! Hardware) (Hardware
   Review) (Evaluation)**
Carlson, Kyla K.
PC-Computing, v7, n7, p70(1)
July, 1994
DOCUMENT TYPE: Evaluation   ISSN: 0899-1847   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 791   LINE COUNT: 00059

...   per-inch black and white; 300-dpi color.
        Speed: 2 pages per minute (ppm) for black in **normal   mode** ; 4
minutes per page (**mpp**) in **normal** color **mode** ; 7 **mpp** in presentation
color mode.
        Ink Cartridge Costs: $31.95 for black; $34.95 for color.
        Ink Cartridge...

26/3,K/8   (Item 8 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01681143   SUPPLIER NUMBER: 15358612   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Color printing gets smarter hues. (HP DeskJet 560C ink-jet printer)
   (Hardware Review) (Evaluation)**
O'Malley, Christopher
Computer Shopper, v14, n6, p355(1)
June, 1994
DOCUMENT TYPE: Evaluation   ISSN: 0886-0556   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 930   LINE COUNT: 00069

...   pace of the pages. Black print speed in Windows is rated at 2 pages
per minute in **normal   mode** and 3 ppm in fast mode. The best-quality
presentation mode, used for gray-scale images, takes...

...expect, color takes a bit longer. Color print speed in Windows is
measured in minutes per page (**mpp**): 7 **mpp** in presentation **mode** , 4
mpp in **normal   mode** , and 3 **mpp** in fast mode. We found those ratings
to be pretty accurate, though they vary with the software...

26/3,K/9   (Item 9 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01607585   SUPPLIER NUMBER: 14010319   (USE FORMAT 7 OR 9 FOR FULL TEXT)
The office color printer. (HP introduces DeskJet 1200C/PS, a fast color
  inkjet printer) (New on the Menu) (Product Announcement)
Ito, Russell
MacUser, v9, n8, p40(1)
August, 1993
DOCUMENT TYPE: Product Announcement   ISSN: 0884-0997   LANGUAGE:
  ENGLISH   RECORD TYPE: FULLTEXT
WORD COUNT: 347   LINE COUNT: 00025

...   megabytes of RAM. The result is a monochrome-text speed of 6 ppm
(pages per minute) in **normal   mode** (7 ppm in fast mode) and a
color-graphics speed of 2 minutes per page (**mpp**), more than 1 ppm in fast
mode.
      To keep the 1200C/PS's output as sharp and...

26/3,K/10   (Item 10 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01602653   SUPPLIER NUMBER: 13972761   (USE FORMAT 7 OR 9 FOR FULL TEXT)
New HP color laser printers. (HP Deskjet 1200C, 1200C/PS) (Product
  Announcement)
Rohrbough, Linda
Newsbytes, NEW05240028
May 24, 1993
DOCUMENT TYPE: Product Announcement   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 729   LINE COUNT: 00054

...   Adobe's latest version of its page description language, Postscript
Level 2.
      The printers offer three print **modes : normal** , high quality, and
fast. **Normal** is the default **mode** which the printer uses if no mode has
been selected and HP says the majority of printing will be done in this
mode . **Normal   mode** offers 300 by 300 dpi text at 6 ppm and three-pass
color graphics at 2 minutes per page (**mpp**).
      High quality mode is slower, but offers better print quality. In this
mode users can get 600...

26/3,K/11   (Item 11 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01544429   SUPPLIER NUMBER: 12912964   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Mailing lists are a snap to print with MLPRINT. (Utilities)(includes
  related articles on obtaining utilities by modem, command reference card,
  updates to earlier utilities) (Column)
Munro, Jay
PC Magazine, v11, n21, p405(8)
Dec 8, 1992
DOCUMENT TYPE: Column   ISSN: 0888-8507   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 4785   LINE COUNT: 00349

...   not being used.
     Printer Port: MLPRINT can print to LPT1 or LPT2. If your laser printer
is **connected** to the **serial** port, use the DOS MODE command to redirect.
The **normal MODE** command for redirecting LPT1 to COM1 is this:
     MODE COM1:9600,N,8,1,P
     MODE LPT1...

 26/3,K/12   (Item 12 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01511970   SUPPLIER NUMBER: 12203805   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Empire helps PowerBook users accessorize. (Empire Engineering to introduce
   Second Serial Port Card, DC Power Adapter, AC pocket adapter for
   PowerBook portable computers)(brief article) (Product Announcement)**
Cohen, Raines
MacWEEK, v6, n17, p9(1)
April 27, 1992
DOCUMENT TYPE: Product Announcement   ISSN: 0892-8118   LANGUAGE:
   ENGLISH   RECORD TYPE: FULLTEXT
WORD COUNT: 245   LINE COUNT: 00018

...   100s and gives users a second mini-DIN 8 RS-422 serial port, using
the connector space **normally** reserved for a **modem** card. As a result,
users can **connect** both a **serial** device and AppleTalk networks
simultaneously.
     >DC Power Adapter. The $99 device, due next month, fits into an...

 26/3,K/13   (Item 13 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01500710   SUPPLIER NUMBER: 11972273   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Dialing for data. (Apple's AppleTalk Remote Access communications software
   package)(Bridges: Operating Systems)(includes a related article on
   dial-in servers with multiple** serial **ports for** connection **to** modems
) (Column)
Somogyi, Stephan
MacUser, v8, n4, p187(6)
April, 1992
DOCUMENT TYPE: Column   ISSN: 0884-0997   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2413   LINE COUNT: 00179

...**Access communications software package)(Bridges: Operating
   Systems)(includes a related article on dial-in servers with multiple**
   serial **ports for** connection **to** modems **) (Column)**

 26/3,K/14   (Item 14 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01440593   SUPPLIER NUMBER: 11004752   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Bitwise: 386SX/16 Notebook; Micro Telesis: NBA386SX; National Micro Systems
   386SX/16 Notebook. (Hardware Review) (one of 18 evaluations of 27
   portable computers in '386SX Laptops: Desktop Power: Notebook Size')
   (evaluation)**

O'Brien, Bill
PC Magazine, v10, n14, p136
August, 1991
DOCUMENT TYPE: evaluation   ISSN: 0888-8507   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1234   LINE COUNT: 00093

...   3- by 6.8-inch triple-supertwist VGA LCD screen with 16 shades of
gray in either **normal** or inverse screen **mode** , one parallel and two
serial ports, **connectors** for an external monitor and a floppy disk
drive, and DOS 3.3. There is no internal...

26/3,K/15   (Item 15 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01345253   SUPPLIER NUMBER: 08016960   (USE FORMAT 7 OR 9 FOR FULL TEXT)
HP printer cartridge brings PostScript to the LaserJet Series IID--fast.
   (Hewlett-Packard) (Hardware Review) (evaluation)
Mendelson, Edward
PC Magazine, v9, n2, p36(1)
Jan 30, 1990
DOCUMENT TYPE: evaluation   ISSN: 0888-8507   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 526   LINE COUNT: 00040

...   of the printer's ROM that governs the PostScript cartridge is
different from the part that controls **normal** HP **mode** . With the
PostScript cartridge plugged in, you will need to reconfigure the IID as a
parallel printer, because the PostScript part of the printer's EPROM still
thinks you're using the **serial   connection** .
     Until PC Labs made some slight changes in the way we downloaded the
benchmark test files to...

26/3,K/16   (Item 16 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01204643   SUPPLIER NUMBER: 05042723   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Megabit dynamic RAMs target system solutions.
Bursky, David
Electronic Design, v35, p35(3)
July 9, 1987
ISSN: 0013-4872   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT
WORD COUNT: 1481   LINE COUNT: 00109

...   can be simultaneously read and fed into an on-chip exclusive-OR
gate. The gate delivers a **single** - **bit** output to show when all bits match
the desired value. If errors are found, the RAM can be switched back into
its **normal   mode** and every suspect bit location tested.
     IBM's 4-Mbit design actually packs four independent 1-Mbit...

26/3,K/17   (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)
(c) 2002 The Gale group. All rts. reserv.

04135961   SUPPLIER NUMBER: 16200390   (USE FORMAT 7 OR 9 FOR FULL TEXT)
The right connections. (includes related articles on best buys,

6

installation, **V.34 standard, checklist for buyers, online services and
modems for portable computers) (Hardware Review) (high-speed fax modems)
(Evaluation)**
Angus, Jeffrey Gordon
PC World, v12, n9, p190(11)
Sept, 1994
DOCUMENT TYPE: Evaluation   ISSN: 0737-8939   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 6696   LINE COUNT: 00504

...   have to be rebooted.
    -- Either use an internal fax-modem or make sure your external model
is **connected** through a **serial** port that uses a 16550 UART. About 50
percent of even the high-speed 486DX and Pentium...

...use the lower-end 8250 UART, which will almost certainly fail with a
28.8-kbps fax- **modem** working at its **normal** speed. You can buy a serial
port that's equipped with a 16550.
    To see which UARTs...

26/3,K/18   **(Item 2 from file: 47)**
DIALOG(R)File 47:Gale Group Magazine DB(TM)
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02740631   SUPPLIER NUMBER: 04038512   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Parallel processing: fact or fancy? Parallel architectures are sprouting
  everywhere - but no everyone who claims to have one really does.**
Serlin, Omri
Datamation, v31, p93(7)
Dec 1, 1985
CODEN: DTMNA   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT
WORD COUNT: 4735   LINE COUNT: 00388

...   node features an 8MHZ 286 MPU and a matching 287 numeric
coprocessor. Internode communications are over 10Mbps **bidirectional bit
- serial links** , controlled at each node by 82586 Ethernet chips. Intel
testing shows each node is capable of about...

26/3,K/19   **(Item 3 from file: 47)**
DIALOG(R)File 47:Gale Group Magazine DB(TM)
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02448221   SUPPLIER NUMBER: 02948632   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Businesspak+: getting down to business with the model 100. (evaluation)
Hart, Glenn A.
Creative Computing, v9, p79(3)
Oct, 1983
DOCUMENT TYPE: evaluation   ISSN: 0097-8140   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 2689   LINE COUNT: 00202

...   invoked the user is asked to select a text file which has been
previously prepared using the **normal Model** 100 editor. A choice of
Telex or ECOM is requested. The program asks for the Telex number (or name
and address for an ECOM) of the recipient. A **pe** -stored default number can
be selected if desired. The program then dials the local Action Telex
office...

26/3,K/20 **(Item 1 from file: 75)**
DIALOG(R)File 75:TGG Management Contents(R)
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00164635   SUPPLIER NUMBER: 14536141   (USE FORMAT 7 FOR FULL TEXT)
Inferring market structure with aggregate data: a latent segment logit
  approach. (includes appendices)
Zenor, Michael J.; Srivastava, Rajendra K.
Journal of Marketing Research, v30, n3, p369(11)
August, 1993
ISSN: 0022-2437   LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 5775   LINE COUNT: 00505

...   first question was investigated by comparing the likelihood of
household purchase histories based on the homogeneous SB& **PE** model with
each of the five segments of the LSL model. Figure 2 provides a plot of...

...LSL segment (the one with brand shares most similar to household level
choice shares) over the SB& **PE**   **model** . The **horizontal** axis in Figure 2
is that of McFadden (1974) |R.sup.2
      (see Appendix B) relative to...

26/3,K/21   **(Item 1 from file: 636)**
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02462578   Supplier Number: 44927613   (USE FORMAT 7 FOR FULLTEXT)
Microsoft Mouse Software Upgraded 08/17/94
Newsbytes, pN/A
August 17, 1994
Language: English   Record Type: Fulltext
Document Type: Newswire; General Trade
Word Count: 365

...   scroll diagonally through spreadsheets with the mouse; the ability
to lock the cursor into a horizontal or **vertical** movement only **mode** ;
and sets of cursor animations that let the user turn the pointer into
shapes like sailboats or...

...the bus version with its expansion card. A combination pack that comes
with both PS/2 and **serial**   **connectors** is also expected to sell for just
under $90. The Intellipoint software is also available with Microsoft...

26/3,K/22   **(Item 2 from file: 636)**
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02090807   Supplier Number: 43857171   (USE FORMAT 7 FOR FULLTEXT)
New HP Color Laser Printers 05/24/93
Newsbytes, pN/A
May 24, 1993
Language: English   Record Type: Fulltext
Document Type: Newswire; General Trade
Word Count: 695

...   Adobe's latest version of its page description language, Postscript
Level 2.
      The printers offer three print **modes** : **normal** , high quality, and
fast. **Normal** is the default **mode** which the printer uses if no mode has

been selected and HP says the majority of printing will be done in this **mode** . **Normal mode** offers 300 by 300 dpi text at 6 ppm and three-pass color graphics at 2 minutes per page (**mpp**).
　　　High quality mode is slower, but offers better print quality. In this mode users can get 600...

 26/3,K/23   (Item 3 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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01914182   Supplier Number: 43343862   (USE FORMAT 7 FOR FULLTEXT)
CROCKER INVESTMENTS OFFERS SOFTWARE DESIGNED FOR INVESTORS
PC Business Products, v4, n10, pN/A
Oct, 1992
Language: English   Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 535

...   closing price and total volume, for the equity that you wish to chart. Set the price scale **vertically** and the volume scale **horizontally** . Now find the SINGLE point on the chart that correctly represents BOTH the price and the volume...

...SINGLE point on the chart that corresponds to BOTH the new price and the new volume. Finally, **connect** the two **successive** price-volume points with a **straight line** and use an arrowhead to indicate the time sequence between the two points. By repeating this procedure...

 26/3,K/24   (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2002 The Gale Group. All rts. reserv.

08286354   Supplier Number: 64690196   (USE FORMAT 7 FOR FULLTEXT)
Option Pricing: How Flexible Should the SPD Be?(Statistical Data Included)
LI, FENG
Journal of Derivatives, v7, n4, p49
Summer, 2000
Language: English   Record Type: Fulltext
Article Type: Statistical Data Included
Document Type: Magazine/Journal; Academic Trade
Word Count: 8636

...   879)

% of Times (H.sub.0) Rejected   18.8   79.9   97.1
                                                                                Fixed-
                                            Variable-Kurtosis   Kurtosis
Normal
      Model Category   T   **PE**
         LP   BS

Average Likelihood Ratio   147.926   146.184 169.934 197.477
                                               (10.597)   (10.597...
...0.012   0.028
      Max   4.579   4.009 4.669   16.686
                                                          Fixed-
                                   Variable-Kurtosis   Kurtosis **Normal**
         Model   T   **PE**   LP   BS
         Mean   0.412   0.411 0.462   0.587

9

| Standard Deviation | 0.355 | 0.357... |

...0.959
| | % of times (H.sub.0) Rejected | 26.9 | 40.9 |
| | Model Category | Variable-Kurtosis | Fixed- |

Normal

| | | | | Kurtosis |

| | Nested | **Models** | GT | T | **PE** |
| | LP | BS |

| Average Z-statistic | | 5.541 | 5.663 5.541 7.115 8.047 |
| | % of times... |

26/3,K/25   (Item 2 from file: 16)
DIALOG(R)File   16:Gale Group PROMT(R)
(c) 2002 The Gale Group. All rts. reserv.

06107140   Supplier Number: 53689147   (USE FORMAT 7 FOR FULLTEXT)
Speeds, Duty Cycles Rise as Vendors Target the Small Office/Home Office
Segment With New Printers -- Epson, HP Aim Color Inkjets at
Businesses.(HP 2500Cse and Epson's Stylus Color 900 printers)(Product
Announcement)
Koenig, Steve
Computer Retail Week, p13(1)
Feb 1, 1999
Language: English   Record Type: Fulltext
Article Type: Product Announcement
Document Type: Magazine/Journal; Trade
Word Count: 323

...   images, presentations, or graphics," he said.
     The 900's print speed is around 10ppm for text in " **normal** " **mode** .
Color pages, depending on coverage, can print at speeds close to 8ppm. To
handle the demands of...

...900's duty cycle to 5,000 pages per month. The 900 includes standard
interfaces for parallel, **serial** and USB **connections** .
     HP's latest "workgroup" color inkjet, the 2500Cse, shipped in
December.
     At a $1,249 ESP, the...

26/3,K/26   (Item 3 from file: 16)
DIALOG(R)File   16:Gale Group PROMT(R)
(c) 2002 The Gale Group. All rts. reserv.

04919734   Supplier Number: 47232435   (USE FORMAT 7 FOR FULLTEXT)
Stallion Technologies announces a networking industry first; New standalone
remote access server extends NT-RAS for remote Microsoft NT users, offers
cost-effective, integrated solution.
Business Wire, p03241039
March 24, 1997
Language: English   Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 673

...   that networked serial ports are transparent to the application and
allow all NT-based applications to operate **normally** over the **modem**
link , with potential **serial** port performance speeds of 230Kbps.
     "NERP is an unusual development in the networking industry, which

10

seems to...

26/3,K/27   (Item 4 from file: 16)
DIALOG(R)File   16:Gale Group PROMT(R)
(c) 2002 The Gale Group. All rts. reserv.

04758769   Supplier Number: 47002842   (USE FORMAT 7 FOR FULLTEXT)
Prism reconfigures data warehouses
UNIX News, p32
Jan, 1997
Language: English   Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 155

...   builds and maintains large-scale warehouses or operational data
stores serving large numbers of users. This systems **normally** scales from
a **moderate** NT server up to an **MPP** system; and finally, The
PrismScaleable Conversion, which provides data conversion capabilities for
migrating data across different application...

26/3,K/28   (Item 5 from file: 16)
DIALOG(R)File   16:Gale Group PROMT(R)
(c) 2002 The Gale Group. All rts. reserv.

04657365   Supplier Number: 46852887   (USE FORMAT 7 FOR FULLTEXT)
**VERSATILE NEW SUMMAGRAPHICS INKJET PLOTTERS OFFER FAST, UNATTENDED PLOTTING
   AND COLOR CAPABILITY AT LOW COST**
News Release, pN/A
Nov 1, 1996
Language: English   Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 854

   (USE FORMAT 7 FOR FULLTEXT)
TEXT:
...of $195 from the manufacturer. Performance and Productivity SummaCAD
models provide a choice of four monochrome plot **modes** --draft, **normal** ,
enhanced and high-resolution monochrome--with selection depending on the
desired output quality and plotting speed. In...

...Autodesk Device Interface) AutoCAD-optimized drivers, vector and raster
data drivers for Microsoft Windows, and parallel and **serial** interfaces.
For **connection** to a local area network, an external Ethernet interface
supporting TCP/IP, Novell and EtherTalk is available...

26/3,K/29   (Item 6 from file: 16)
DIALOG(R)File   16:Gale Group PROMT(R)
(c) 2002 The Gale Group. All rts. reserv.

03897632   Supplier Number: 45614378   (USE FORMAT 7 FOR FULLTEXT)
Lunatic fringe' eyes fresh ideas
Electronic Engineering Times, p67
June 19, 1995
Language: English   Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1831

...   of processor and memory with more-efficient use of DRAM-information

access. In the standard DRAM readout **mode** , an entire **row** of bits needs
to be accessed to read a **single bit** . The 'processor-in-memory'
architecture, by contrast, directly loads rows into the 16-bit registers of
the...

26/3,K/30   (Item 7 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2002 The Gale Group. All rts. reserv.

02461183   Supplier Number: 43245066   (USE FORMAT 7 FOR FULLTEXT)
Zilog respins Z80 chip
Electronic Engineering Times, p56
August 24, 1992
Language: English   Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 497

...   the pin count. Zilog anticipates selling this part into internal
and external modems. But while an external **modem normally** interfaces to
the serial port on the back of a PC, an internal modem must talk directly
...

...can function normally, meaning it talks to a serial port, or it can
mimic a standard 16550 **serial** port, **connecting** directly to an AT or XT
bus.
        The part also has some new electrical features to meet...

26/3,K/31   (Item 8 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2002 The Gale Group. All rts. reserv.

01059683   Supplier Number: 41174279
**APM SALES & MARKETING CORP., 90 13th Avenue, Ronkonkoma, New York., now
  makes available a new compact horizontal wrapper, Model Speedy 1, with
  speeds up to 100**
News Release, p1
Feb 15, 1990
Language: English   Record Type: Abstract
Document Type: Magazine/Journal; Trade

ABSTRACT:
APM SALES & MARKETING CORP., 90 13th Avenue, Ronkonkoma, New York., now
makes available a new compact **horizontal** wrapper, **Model** Speedy 1, with
speeds up to 100 packages per minute. Unit is designed to accept products
in...

...19" and height up to 3 1/2". Unit is designed to seal OPP, Cellophane,
Polycel, Zeelon, **PE** /Paper Foil/Polyethylene. It uses readily available
roll-stock film to produce a package with a fin...

26/3,K/32   (Item 1 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)
(c) 1999 The Gale Group. All rts. reserv.

00410351
  **One-operation blown-film coextrusion permits economical production of
    combination films through multilayered production at favorable costs
    due to the optimization of essential parts of the extrusion line.**

...non-rotating die. Wide films from materials processed at below 220 C can be produced in polyethylene (**PE**) combination lines using **modern** -design **horizontal** extruders. Universal lines to process polyamides (PA) have been developed to meet the requirements of packaging films...

Search report

```
Set     Items    Description
S1      21381    MASSIVELY()PARALLEL()PROCESSOR? OR MPP OR PLURALITY()PROCE-
                 SSING()ELEMENT? OR PPE OR PE OR PROCESSOR()(ARRAY? OR ARRANGE-
                 MENT? OR ORDER OR FORMATION)
S2       6366    (SERIAL? OR CONSECUTIVE? OR SUCCESSIVE? OR SEQUENTIAL?)(2N-
                 )(CONNECT? OR LINK?) OR SINGLE()BIT
S3       4995    MODE? (3N) (VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUM-
                 N?)
S4       7646    MODE? (3N) (HORIZONTAL? OR ROW OR NORMAL?)
S5        607    MODE? (3N) (BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DI-
                 RECTION? OR PERPENDICULAR? OR STRAIGHT()LINE)
S6        139    VERTICAL()(MEMORY OR STORE? OR STORAGE OR ROM)
S7     340110    VERTICAL? OR UPRIGHT? OR BIT()SERIAL? OR COLUMN?
S8     594470    HORIZONTAL? OR ROW OR NORMAL?
S9      46247    BIDIRECTION? OR BI()DIRECTION? OR OPPOSITE()DIRECTION? OR -
                 PERPENDICULAR? OR STRAIGHT()LINE
S10         0    S1 (S) S2 (S) S3 (S) S4 (S) S5
S11         5    S1 (S) S2
S12     27695    S1 OR S2
S13         0    S12 (S) S3 (S) S4 (S) S5
S14         4    S12 (S) S3
S15        24    S12 (S) S4
S16         0    S15 (S) S5
S17         1    S12 (S) S5
S18         0    S12 (S) S6
S19       462    S12 (S) S7
S20        84    S19 (S) S8
S21         6    S20 (S) S9
S22        52    S1 AND S2
S23         0    S22 (S) S3
S24         1    S22 (S) S4
S25         0    S22 (S) S5
S26         0    S22 (S) S6
S27         2    S22 (S) S7
S28         2    S22 (S) S8
S29         3    S22 (S) S9
S30        39    S14 OR S15 OR S17 OR S21 OR S24 OR S27 OR S28 OR S29
S31        32    S30 NOT PY>2000
S32        30    S31 NOT PD>20000831
S33        30    RD (unique items)
File  15:ABI/Inform(R) 1971-2002/Jul 30
         (c) 2002 ProQuest Info&Learning
File 647:CMP  Computer Fulltext 1988-2002/Jul W4
         (c) 2002 CMP Media, LLC
File 674:Computer News Fulltext 1989-2002/Jul W3
         (c) 2002 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2002/Jul 29
         (c) 2002 The Dialog Corp.
File  98:General Sci Abs/Full-Text 1984-2002/Jun
         (c) 2002 The HW Wilson Co.
File 624:McGraw-Hill Publications 1985-2002/Jul 30
         (c) 2002 McGraw-Hill Co. Inc
File 369:New Scientist 1994-2002/Jul W1
         (c) 2002 Reed Business Information Ltd.
File 484:Periodical Abs Plustext 1986-2002/Jul W3
         (c) 2002 ProQuest
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2002/Jul 30
         (c) 2002 PR Newswire Association Inc
File 141:Readers Guide 1983-2002/Jun
```

1

File 370:Science 1996-1999/Jul W3
File 553:Wilson Bus. Abs. FullText 1982-2002/May

33/3,K/1   (Item 1 from file: 15)
DIALOG(R)File   15:ABI/Inform(R)

02244797 86923926
Sensor gateway to fieldbuses
Derek Paul Lane
Sensor Review v17n3 PP: 211-216 1997
ISSN: 0260-2288 JRNL CODE: SEN
WORD COUNT: 3557

...TEXT: communication protocol (invented by Stegmann) on RS422 to
communicate between the encoder and input module.

High-speed   **bi** **- directional** counters ensuring pulses of up to 100KHz at
24V DC are captured. These have two input signals, one for the up pulse and
one for down pulse. This would allow position tracking of a **single** **bit** ,
or entry/exit values giving contents inside, such as a car park. The
position register can be...

33/3,K/2   (Item 2 from file: 15)
DIALOG(R)File   15:ABI/Inform(R)

02036543 55345175
Advanced transportation controller standards overview
Anonymous
Institute of Transportation Engineers. ITE Journal v70n6 PP: 26-29 Jun
2000
ISSN: 0162-8178 JRNL CODE: TE
WORD COUNT: 3505

...TEXT: impact on the software investment.

ACKNOWLEDGMENTS

The ATC Steering Committee acknowledges the work of Paul R Olson, **PE .,**
FHWA Western Resource Center, who lead the effort to author this **column ,**
and the leadership of Raj Ghanian, FHWA Research and Development, who
championed the ATC initiative from its...

33/3,K/3   (Item 3 from file: 15)
DIALOG(R)File   15:ABI/Inform(R)

01915826 05-66818
Conversion of signal-timing plans into traffic-controllers parameters
Khatib, Zaher K; Coffelt, Paul B
Institute of Transportation Engineers. ITE Journal v69n8 PP: 36-40 Aug
1999
ISSN: 0162-8178 JRNL CODE: TE
WORD COUNT: 3123

...TEXT: by one of two methods.

With the simplest method, interface software is installed, which enables a
PC **serial** **connection** to the controller in the field and allows data
transfer on site. The second method is to make the **serial** **connection**
with modems, so engineers and technicians can dial into controllers and

change timings from remote locations such as a traffic-control center. Interface programs are **normally** designed for userfriendly data exchange and programming of complete controller functions, including splits.

During signal-timing design...

33/3,K/4   (Item 4 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01899447 05-50439
NEC debuts new 50-inch Plasma
Simons, Tad
Presentations v13n9 PP: 20 Sep 1999
ISSN: 1072-7531   JRNL CODE: PRS
WORD COUNT: 225

...TEXT: more realistic-looking picture.

Among the other features included with the 5000W are an RS-232-compatible **serial connection** and an intelligent image-- scaling system that enables the monitor to display conventional computer graphics and video with a 4:3 aspect ratio, as well as 16:9 images in four different **modes** : **normal** , full, stadium and zoom. The unit also comes with a hand-held remote and includes a built...

33/3,K/5   (Item 5 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01235595 98-84990
Axil's S/420 HyperSPARC server
Barker, Ralph
UNIX Review v14n8 PP: 53-58 Jul 1996
ISSN: 0742-3136   JRNL CODE: UXR
WORD COUNT: 2354

...TEXT: controller in the subsystem, along with associated configuration utilities. Earlier models of the S/420 provide a **serial** communication **link** between the main chassis and the RAID subsystem. To configure the RAID subsystem, the installer uses the...

... RAID level 5 is the desired configuration, the installed disks can be formatted and mounted in the **normal** manner. Newer **models** of the S/420 provide a utility that configures the subsystem directly via the SCSI bus.

Documentation...

33/3,K/6   (Item 6 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01050445 96-99838
What's new
Warner, Paul D
CPA Journal v65n6 PP: 64-65 Jun 1995
ISSN: 0732-8435   JRNL CODE: CPA
WORD COUNT: 994

...TEXT: well as mixed computing environments.

Operating Modes

The printers have three modes of print quality and speed:

* **Normal** **mode** (the default **mode** and the mode HP believes will account for more than 70% of the printer's use) produces...

... x 300 dpi text at 6 ppm and three-pass color graphics at 2 minutes per page (**mpp**).

*High-quality mode which provides superior print quality for text and color--producing 600 x 300 dpi...

33/3,K/7 **(Item 7 from file: 15)**
DIALOG(R)File 15:ABI/Inform(R)
(c) 2002 ProQuest Info&Learning. All rts. reserv.

00940060 95-89452
Designing reliability into solid-state disk emulators
Tuma, Wade
Computer Technology Review v14n10 PP: 52 Oct 1994
ISSN: 0278-9647 JRNL CODE: CTN
WORD COUNT: 1066

...TEXT: of errors that are most predominant in SSDs will rarely be corrected by this error recovery technique.

ROW **MODE** ERROR CORRECTION

Row **mode** error correction technology was originally developed to error-correct main memory in CPUs. This type of error...

...bits of additional data must be appended to each row to allow double-bit error detection and **single** **bit** error correction. Thus this type of error detection correction system can repair one error in every 64...

33/3,K/8 **(Item 8 from file: 15)**
DIALOG(R)File 15:ABI/Inform(R)
(c) 2002 ProQuest Info&Learning. All rts. reserv.

00652614 93-01835
Integrators Write Rx for Lazy CPUs: Communications Servers Put Them to Work
Trowbridge, Dave
Computer Technology Review v12n13 PP: 1, 11 Nov 1992
ISSN: 0278-9647 JRNL CODE: CTN
WORD COUNT: 1736

...TEXT: capability thus leaves many UNIX users in the lurch when they seek to connect printers, terminals, or **modems** to these systems. **Normally ,** multiport serial I/O boards are the answer, but they require an expansion slot. What's a...

... and not yet common. The first, long familiar in the DEC world, is the terminal server, which **connects** **serial** devices to an Ethernet and handles all the protocol processing needed to connect terminals, printers, and modems...

33/3,K/9   (Item 9 from file: 15)
DIALOG(R)File   15:ABI/Inform(R)
(c) 2002 ProQuest Info&Learning. All rts. reserv.

00631028 92-45968
Handheld Computing
O'Brien, Terrence V.
Marketing Research: A Magazine of Management & Applications v4n2 PP:
34-36 Jun 1992
ISSN: 1040-8460 JRNL CODE: MRE
WORD COUNT: 2098

...TEXT: pressed, the next key pressed is shifted, such as upper case. The
shift key works in the **normal** hold-it-down **mode** , too.) **Connects** to
standard **serial** devices, such as a modem, printer, or fax modem. With
converter ($99 at Radio Shack), a parallel...

33/3,K/10   (Item 10 from file: 15)
DIALOG(R)File   15:ABI/Inform(R)
(c) 2002 ProQuest Info&Learning. All rts. reserv.

00607067 92-22170
Factors Affecting Price Earnings Ratios and Market Values of Japanese Firms
Constand, Richard L.; Freitas, Lewis P.; Sullivan, Michael J.
Financial Management v20n4 PP: 68-79 Winter 1991
ISSN: 0046-3892 JRNL CODE: FMG
WORD COUNT: 7566

...TEXT: Our results suggest that variables such as risk, earnings and
dividend growth, and dividend payout, that are **normally** associated with
textbook **models** of **PE** ratio, are also significantly related to changes
in both **PE** ratio and market value changes in Japanese firms. Furthermore,
the rise in **PE** ratios and market values are not a consequence of a
decrease in the required rate of return...

... industrialized nations. The results associated with the change in
special reserves support an earnings-based influence on **PE** ratios and
market values.

We summarize our results as follows. The primary factors behind the
dramatic increase...

33/3,K/11   (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2002 CMP Media, LLC. All rts. reserv.

01183737   CMP ACCESSION NUMBER: CRW19990201S0021
Speeds, Duty Cycles Rise as Vendors Target the Small Office/ Home Office
    Segment With New Printers - Epson, HP Aim Color Inkjets   at Businesses
Steve Koenig
COMPUTER RETAIL WEEK, 1999, n 233, PG13
PUBLICATION DATE: 990201
JOURNAL CODE: CRW   LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: Business Solutions
WORD COUNT: 325

...   images, presentations, or graphics," he said.

The 900's print speed is around 10ppm for text in " **normal** " **mode** .
Color pages, depending on coverage, can print at speeds close to 8ppm. To
handle the demands of...

...900's duty cycle to 5,000 pages per month. The 900 includes standard
interfaces for parallel, **serial** and USB **connections** .

HP's latest "workgroup" color inkjet, the 2500Cse, shipped in
December.

At a $1,249 ESP, the...

33/3,K/12   (Item 2 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2002 CMP Media, LLC. All rts. reserv.

01056557   CMP ACCESSION NUMBER: EET19950619S0055
Conference explores 'silicon publishing,' other leading-edge notions -
    'Lunatic fringe' eyes fresh ideas (CROSSTALK)
Chappell Brown
ELECTRONIC ENGINEERING TIMES, 1995, n 853, PG67
PUBLICATION DATE: 950619
JOURNAL CODE: EET   LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: TECHNOLOGY
WORD COUNT: 1820

...   of processor and memory with more-efficient use of
DRAM-information access. In the   standard DRAM readout **mode** , an entire
row of bits needs to be accessed to read a **single**   **bit** . The
"processor-in-memory" architecture, by contrast, directly loads rows into
the 16-bit registers of the...

33/3,K/13   (Item 3 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2002 CMP Media, LLC. All rts. reserv.

00632876   CMP ACCESSION NUMBER: EET19891120S0989
Modules for embedded PCs
KATHY ROGERS
ELECTRONIC ENGINEERING TIMES, 1989, n 565, 46
PUBLICATION DATE: 891120
JOURNAL CODE: EET   LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: DES
WORD COUNT: 409

...   I/O ports. It consists of two ports. One is bidirectional parallel
port; the other is a **serial**   **link** that can be configured an an
RS-232-C, RS-422 and RS-485 link. The parallel port can be used as a
Centronics-compatible printer port or for general-purpose **bidirectional**
I/O.
      MM/ **Modem** features all the circuitry of an industry-standard 2,400-
baud Hayes-compatible modem. It also includes...

33/3,K/14   (Item 4 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext
(c) 2002 CMP Media, LLC. All rts. reserv.

00576594   CMP ACCESSION NUMBER: UNX19900122S4435
**SOFTWARE Product: Microshop IV Version 2.4, job shop manufacturing
    software....** (Products Briefs)
UNIX TODAY , 1990, n 037, 35
PUBLICATION DATE: 900122
JOURNAL CODE: UNX   LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: PRODUCTS
WORD COUNT: 1653

...   controller brings multiple users and timesharing to SPARCstation
by allowing up to 8 simultaneous asynchronous or synchronous **serial
connections** per expansion board. Each port features full modem control
and a baud rate from 300 to 38...

...software driver, allows connection to any Centronics-compatible printer
or can be used as a general-purpose **bidirectional** parallel port for
interfacing to any device using standard signal levels.
        Circle Reader Service No. 209
        Product...

 33/3,K/15   (Item 5 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2002 CMP Media, LLC. All rts. reserv.

00544691   CMP ACCESSION NUMBER: WIN19931101S3045
Carbon Copy 2.0 - Easy File Transfer
Rick Vizachero
WINDOWS MAGAZINE, 1993, n 411 , 118
PUBLICATION DATE: 931101
JOURNAL CODE: WIN   LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: First Impressions
WORD COUNT: 712

...   drop, to move files across the wires between computers.
        Carbon Copy lets you control computers across LAN **connections** ,
directly wired **serial   connections** and communications servers as well
as the **normal   modem** link. The manual selection of 134 modems is
passable, but a program that auto-recognizes the modem...

 33/3,K/16   (Item 6 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2002 CMP Media, LLC. All rts. reserv.

00509766   CMP ACCESSION NUMBER: EET19920824S2634
Zilog respins Z80 chip
, RON WILSON
ELECTRONIC ENGINEERING TIMES, 1992, n 707, 56
PUBLICATION DATE: 920824
JOURNAL CODE: EET   LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: Design - Solid State
WORD COUNT: 502

...   the pin count. Zilog anticipates selling this part into internal

and external modems. But while an external **modem** **normally** interfaces
to the serial port on the back of a PC, an internal modem must talk
directly...

...can function normally, meaning it talks to a serial port, or it can
mimic a standard 16550 **serial** port, **connecting** directly to an AT or XT
bus.
        The part also has some new electrical features to meet...

   33/3,K/17   (Item 1 from file: 696)
DIALOG(R)File 696:DIALOG Telecom. Newsletters
(c) 2002 The Dialog Corp. All rts. reserv.

00728337
Broadband Bulletin
CableFAX
May 31, 2000 VOL: 11   ISSUE: 106   DOCUMENT TYPE: NEWSLETTER
PUBLISHER: PHILLIPS BUSINESS INFORMATION
LANGUAGE: ENGLISH   WORD COUNT: 480   RECORD TYPE: FULLTEXT

        (c) PHILLIPS PUBLISHING INTERNATIONAL All Rts. Reserv.

TEXT:
...NetGame and GVC, the last of which was certified as "plug-and-play" due
to its
universal **serial** bus **connector** that dispenses with the need to have an
Ethernet
card installed on the computer. 3Com [COMS] had...

...in its 3Q over the next two quarters now
that Motorola [MOT] has increased its supply of **modems** to " **normal** ."

Int'l
UPC's [UPCOY] Chello broadband 'Net access unit delayed its $717mln
(773mln euros) IPO until...

...Supply

Good news for Shaw [SJR] from Motorola [MOT] as Motorola has restored its
supply of cable **modems** to **normal** , effectively May 30, and this has
allowed Shaw
to renew its marketing campaigns. Motoroal has also provide...

   33/3,K/18   (Item 1 from file: 98)
DIALOG(R)File 98:General Sci Abs/Full-Text
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04255643   H.W. WILSON RECORD NUMBER: BGSA00005643   (USE FORMAT 7 FOR
FULLTEXT)
Meiotic chromosomes: integrating structure and function.
AUGMENTED TITLE: review
Zickler, D
Kleckner, N
Annual Review of Genetics v. 33 (1999) p. 603-754
SPECIAL FEATURES: bibl il   ISSN: 0066-4197
 LANGUAGE: English
COUNTRY OF PUBLICATION: United States
WORD COUNT: 73948

(USE FORMAT 7 FOR FULLTEXT)

TEXT:
...   a surface, are helpful (in permitting the analysis of many more
nuclei than can be analyzed by **serial** sections) to study a specific
problem, e.g. synapsis or interlockings (e.g. 407, 465), recombination
nodule...several mutants defective in SC formation, at a more or less
reduced level compared to wild type. **Normal** numbers of meiotic chromosome
pairing interactions, with concomitant full homolog coalignment, occur in
hop1 and spo11-Y135F...frequent (52); both defects may be manifestations of
aberrant pairing. These findings provide evidence that homolog pairing
normally occurs in such a way that interlocking is avoided. Second, in
certain images of nuclei containing interlockingsconcomitantly encircling
one or more other chromosomes. By inference, such interlocks are **normally**
avoided by early homolog colocalization. Third, interlockings can be
induced by premeiotic colchicine treatment (502) or heat...

...to spend relatively more time in zygotene, which would give the same
appearance as greater abundance with **normal** stage durations. Finally, the
nuclei with several interlocks might remain blocked at zygotene and thus
never be...a defined locus on the long arm of chromosome 5B). When this
locus is present in its **normal** complement, with chiasma formation
restricted to the homologous chromosomes, only bivalents are observed at
metaphase I (152...in chromosomes that are mosaics of homologous and
homeologous regions, in the presence of Ph1, crossovers occur **normally**   in
the homologous regions but not in the homeologous regions of the same
chromosomes (299). Similarly, in...

...strand breaks (DSBs) occur equally on both chromosomes; nonetheless, the
rate of formation of intragenic recombinants (which **normally** arise mostly
via heteroduplex DNA) is reduced 40-fold as compared to the homologous
control. Moreover, in...using a mitotic model system, suggests that the
occasional intragenic recombinants that arise between homeologous
sequences are **normally** resolved as "gene conversions" rather than
crossovers and that mismatch repair components limit the extent of
heteroduplex...

...few organisms SCs are reported to lack CEs. The green alga Ulva   (591)
and Chlamydomonas (882) show **normal** LEs and central region but no CE.
All Meloidogyne (nematodes) species studied thus far (except M. microtyla)
show **normal** AE/LEs but lack CEs and often also exhibit a narrow (30-40
instead of 100 nm...from the spo22 mutant of Coprinus cinereus: this
mutant, defective in premeiotic DNA replication, forms nevertheless
completely **normal** SCs (400). It further appears that LE/AE organization
corresponds to chromatin loop organization (section below).

        MORPHOLOGICAL...

...in several organisms and mainly take the form of swellings or
thickenings of different lengths, on otherwise **normal** LEs (reviewed in
173, 289, 654). Unsynapsed AEs of the same species do not show deformities;
abnormalities...PCs have, however, been observed only rarely. In the
mosquito Culex pipiens oocytes, the transverse filaments, which **normally**
span the central region, pass outside the SC, extend and attach to the LE
of another bivalent...I, and are segregated through both meiotic divisions
(534).
        c. Multiple SCs can be seen associated to **normal** synapsed SCs at
pachytene apparently without effect on meiosis or recombination as in
Neurospora (52). In tomato...

...these types of effects may account for much of the variability observed

in what is otherwise apparently **normal** meiosis (discussed above).

MORPHOLOGIES
The detailed architecture, size, and shape of polycomplexes are highly variable between organisms...

...formation. In contrast, the dense elements of PCs show much more morphological variation as compared to the **normal** AE/LE structure on chromosomes: Sometimes their thickness is sufficient to account for the width expected when...

...the formation of extensive amounts of PCs (Form I and networks) in a strain that does not **normally** produce such structures (492). Third, when the length of the Zip1 protein is altered by increasing the...assemble independently of the AE components Hop1p and Red1p (492). Moreover, other proteins like Zip2p and Pch2p, **normally** located onto the AE and the nucleolus, respectively, are also located in PCs resulting from overexpression of...two chiasmata, the pairs of homolog arms in adjacent inter-chiasma intervals appear to lie in two **perpendicular** planes and, in addition, are bent or curved. This phenomenon, usually referred to as repulsion, but perhaps...

...close. Second, "there is a tendency for the chromosomes or chromosome parts to arrange themselves parallel or **perpendicular** to each other ... clearly seen during straightening of the arms in c-anaphase when, after separation, the chromatids tend to arrange themselves **perpendicular** .... Also, if a chromosome arm forms a loop the angle at the crossing is approximately 90[degree...

...436). Most recently, polymer models have been considered for this and other aspects of chromosome organization (311).

NORMAL SC IS SOMETIMES ABSENT
SCs are absent in three fungi, Schizosaccharomyces pombe (24, 377, 731), Ustilago maydis...
...recombination and premature segregation of sister chromatids at meiosis I (352), phenotypes also observed in mutants lacking **normal** AE/LEs in other organisms, including a rec8 mutant of budding yeast (267; see below).

ACHIASMATE MEIOSIS--WITH AND WITHOUT SC
Organisms that lack chiasmata at diplotene (Figure 9) can still exhibit **normal** SC as shown for achiasmate male Bolbe nigra (168) and Panorpa communis (528), in achiasmate female of Bombyx mori (404, 813), and Ephestia kuehniella (310, 504). In all four species, SCs form **normally** at early prophase but, instead of disappearing at diplotene as in the standard program, are retained until...

...is otherwise regular, the 4th chromosome rarely undergoes crossing over but shows regular SC confined to the **normal** prophase stages just as for other chromosomes (75, 198). Here, however, no stable connection between the homologs is present at metaphase I and backup mechanisms ensure **normal** disjunction (198). A case of meiosis without recombination has also been reported in Saccharomyces ludwigii (e.g...regions that would indicate an alteration in underlying organization. No differences are seen in sectioned material or **normally** spread material of tomato (though unique AE/LE morphology can be revealed by DNase I treatment plus...Correspondingly, whereas 1 DNA minichromosomes in yeast are nearly inert for recombination (425), human YACs exhibit substantially **normal** behavior for recombination and chromosome segregation (235, 448, 449, 730). Similarly, and

9

dramatically, when Xenopus sperm are...AE CAN BE SINGLE OR DOUBLE
The AE/LE, like the bulk chromatin of each sister pair, **normally** appears
as a single morphological unit. In some situations, however, duality is
directly observable; in addition, "splitting...

...an AE. In this mutant, homologous maternal and paternal chromatids still
identify one another and form apparently **normal** SC (400).

Evidence for functional duality in **normal** chromosomes is also
suggested by the finding that two SCs can share a single LE. In triploids
...

...two flanking central regions, yielding either a planar or a triangular
array. Such observations imply that the **normal** LE, despite its unitary
morphological appearance, can be functionally double with respect to its
capacity to organize...

...chromatids coalign, SC forms only pairwise; no triple synapsis is
observed. It was inferred that whereas a **normal** AE is functionally double
and thus can join with two central regions, a unitary one-chromatid axis...

...observed singleness of LEs at zygotene, but discernible doubleness by
early to mid-pachytene in the plane **perpendicular** to the SC (with
coordinately denser and thicker appearance); then, at late pachytene, LEs
become progressively more...

...at the leptotene/zygotene transition. In the spo76-1 mutant of Sordaria,
AEs initially form in the **normal** unitary way but then split at the
leptotene/zygotene transition (512, 783). Along mutant chromosomes at this
...

...reflects the response to a disruptive force that occurs at the
leptotene/zygotene transition. This force would **normally** be channeled via
Spo76 into some important step of chromosome morphogenesis; in spo76-1, by
contrast, the...

...F1 hybrid of an interspecific cross: the X/Y chromosome pair exhibited
either of two alternative morphologies: **normal** SCs and chromatin or
failure of synapsis plus diffuse chromatin (763).

Reports of splitting along leptotene chromosomesSISTER CHROMATIDS ARE
STACKED **VERTICALLY** AT THE EDGES OF THE SC RIBBON
Dresser & Moses (137) argued from early spreading studies that sister
chromatid subaxes were parallel and lay in a plane **perpendicular** to the
SC axis (see also 372) (Figure 10) in support of earlier studies.
Ultrastructural analysis of...loops and spacers present in the same
chromosome at the immediately preceding pachytene stage? Newt chromosomes
exhibit **normal** pachytene and diffuse diplotene stages immediately prior
to the lampbrush stage and then, subsequently, exhibit a modified...
sections of rat, hamster (129, 327, 441), and mouse SCs (288) suggest that
SCP1 molecules are oriented **perpendicularly** to the LEs with two fully
extended molecules spanning the central region in a tail-to-tail...

...strains results in formation of numerous polycomplexes, as analyzed in a
strain background where PCs do not **normally** occur (492).
The organization of Zip1 within pachytene chromosomes appears to be
similar to that of SCP1...

...of Zip1--in Brief Zip1 protein is not strongly required for intersister
relationships: AE morphogenesis is apparently **normal** (compare Figure 2a
and Figure 14), and sisters usually segregate together at meiosis I, even

when homologs...
...where cell cycle arrest/delay is less severe, the total number of
recombinational interactions appears to be **normal** , as assessed both
genetically and physically, but the array of product types is severely
affected (483, 491...the protein is overproduced or in a zip1 mutant where
SC does not form (461), implying a (**normally** restrained) propensity for
spreading. Double immunofluorescence staining with anti-Red1p and
anti-Hop1p shows extensive colocalization; ...by FISH (25). A red1 mutant
fails to assemble any discernible AE or SC structure and exhibits **normal**
chromosome compaction. A hop1 mutant forms long fragments of AEs, but no
SCs and is defective in...

...such arrest occurs if a red1, hop1, or mek1 mutation is present. This
latter finding implies that **normal** chromosome structure is important if
the cell is to monitor the progression of chromosome metabolism. This
effect could be indirect, because **normal** chromosome structure is required
for assembly of a **normal** interhomolog recombination complex (see below)
or direct, because chromosome structure per se is involved in monitoring.
Yeast...422). Hop2 is thus suggested to play an important role during
the first steps of recombination which **normally** , in some way, constrain
SC formation to occur between homologs (282).
Rec8 Rec8, identified originally in S...
...of pachytene spermatocytes (8). Moreover, in the absence of this
protein, spermatocyte meiosis arrests at pachytene, with **normal** SC
formation (128), and without activation of CDC2 kinase activity (930),
possibly as a consequence of the...including topoisomerase II (892). In
mitotic cells, S-phase and formation of chromosome cores can proceed
relatively **normally** in the absence of TopoII activity though not
necessarily in the complete absence of TopoII protein (485...auxiliary
features. An example might be yeast Pch2 protein, whose absence does not
affect spore viability during **normal** meiosis but does affect checkpoint
control and recombination in the specialized rDNA compartment (431).
Fifth, the recombination...

...which show both a decreased frequency of crossovers and a defect in
interference (491). Thus, it is " **normal** " that most or all of the proteins
involved in the recombination processes are located onto the chromosome...

...of mammalian spermatogenesis, unique changes occur that are thought to
represent the beginning of a transition from **normal** histone arrays to
protamines, via transition proteins, during packaging of chromosomes into
sperm. A testis-specific H1...the role of Pch2 in meiotic prophase
checkpoint arrest (431). The meiosis-specific axis component Hop1p, which
normally localizes only to AE/LEs, is found in the nucleolus in both pch2
and sir2 mutants, in...

...exhibits defects in recombination and spore formation (89, 755). SC
formation and chromosome compaction and decompaction appear **normal** ,
however. Mutations in one of two Bdf1 bromodomains confer only meiotic
defects (...the presence of both is correlated with the formation of LNs in
the female (74, 75). While **normal** SCs are observed in male and female
Bombyx, LNs form in the chiasmate spermatocytes, but not in...mutants,
mei-W68 (defective in the Drosophila homolog of yeast DSB transesterase
Spo11) and mei-P22, exhibit **normal** SCs but no nodules, crossovers, or
intragenic recombination (321, 322). The mei41 mutant homolog of cell
cycle...

...to 8[percent] of wild type and crossover interference is abolished but
intragenic recombination at rosy is **normal** or enhanced, with shorter
conversion tracts than the control (83); both types of nodules are reduced
to...some nuclei (27, 32, 33).

mutant cells); these...

...the yeast genome by HO endonuclease cleavage during meiosis can provoke high levels of crossing over, with **normal** dependency on meiotic recombination functions known to act after DSB formation (e.g. MSH4/5; R Malkova...all imply that, irrespective of the extensive programming which guide DSB formation and SC formation during the **normal** meiotic program, reasonably robust meiosis can be achieved in the absence of such features. This conclusion is...

...elegans, where SC forms in the absence of recombination initiation. On the other hand, such organisms may **normally** exhibit exactly the same program as inferred for other cases and differ only with respect to the potency of secondary SC nucleation mechanisms, which can promote SC formation in a relatively **normal** time frame even when **normal** nucleation mechanisms are missing.

Crossover Control and the SC A correlation between crossover commitment and nucleation of...containing CEN3 plus surrounding sequences can, when inserted, act in cis to suppress meiotic recombination in a **normally** active region (273). This finding can be linked to the cohesins distribution by the finding that a...

...binding of cohesins in artificial chromosomes (D Koshland, personal communication). Second, in fission yeast, meiotic recombination is **normally** several-fold lower near centromeres than in arms (331); moreover, three genes, rec8, rec10, and rec11 specifically...rest of the genome (above; 445). Furthermore, rDNA recombination occurs by a different (RAD50-independent) pathway than **normal** meiotic recombination (185). Meiotic rDNA recombination, both between homologs and between sisters, is suppressed by the chromatin...

...to genetic perturbation. Finally, while recombination-less (achiasmate) meiosis might reflect any number of variations from the **normal** program, the chromosomes of such organisms could formally be considered whole genome compartments, with the absence of...

...512). An analogous defect is observed in mitotic cells, at prometaphase, although chromosome morphology at metaphase is **normal** . The meiotic spo76-1 defect results in a block to recombination, apparently at the DSB to dHJ transition. It is inferred that, for **normal** chromosomes, the leptotene/zygotene transition includes the transient imposition of a disruptive force, here referred to a "stress", whose effects are **normally** transduced into effects on the recombination process. The imposed stress could then be relieved in a specific...including crossovers. (d) Rad51 foci occur at non-matching positions along unsynapsed homologs (31), implying that DSBs **normally** do not occur at corresponding positions. (e) Axis-associated DSB formation could provide an opportunity for differentiating...These events would guided in some way by the underlying DNA. Also, recent work shows that proteins **normally** associated with the chromosome axes, e.g. SCP2, SMC1, SMC3, and possibly also SCP3, are found in...

...at post-pachytene stages (434, 841). This could suggest that axis-associated proteins "ooze" out of their **normal** locations along the crossover-associated DNA to form these structures. Ultimately, however, once recombinant axes have developed...expected to affect the recombination process via "coupling defects," causing either recombinational processes to be uncoupled from **normal** chromosomal or nuclear processes or, conversely, the recombination process to be blocked at an important barrier and...

...post-DSB recombination-related processes can still function even when the DSBs do not occur in the **normal** way. For the proposed model, these

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findings could suggest that relatively **normal** interhomolog structural bridges may form even when the DSB occurs randomly in the genome rather than the...

...nucleated by crossover-committed interactions between both homologs and homeologs. Evidence from yeast suggests that DSBs occur **normally** in homeologous segments and that homology/homeology discrimination occurs later, but often prior to formation of permanent...During synaptic adjustment, the situation would be analogous to that in allohexaploid wheat except that nascent, otherwise **normal** , crossover-committed interactions within the destabilized chromosomal rearrangement region would be destabilized and released from their specific...

...e.g. 467, 468). Perhaps this is an additional effect of the stress transition, one that is **normally** counteracted by the presence of SC, in correlation with a tendency for SCs to be shorter at...

...axes, as in Psilotum (13) (Figure 20B-bottom). Furthermore, in the above model, such nonhomologous capture would **normally** be specifically precluded by the fact that stable DSB-mediated capture of a homolog axis is dependent...

...level aberrant (as implied by hyperresection of DSBs) but, in addition, bridge formation is uncoupled from its **normal** requirement for homologous interactions at the DNA level. This could explain why the hop2 mutant defect is...

...nonhomologous synapsis (369). In other situations, nonhomologous SC would have to form via an override of the **normal** dependency on homologous DNA/DNA contacts and might thus be less extensive than in hop2. A pms2...

...g. in plants and Bombyx triploids), which can be quite efficient, SC formation might be independent of **normal** nucleation because the foldback point brings two AEs close enough together to nucleate SC formation in the ...
...any specific bridge.

It may also be relevant that, in many cases, nonhomologous synapsis appears later than **normal** synapsis would have, sometimes explicitly as a second phase. Perhaps there is a removal of restrictions to nonhomologous synapsis at later stages or, alternatively, the "force for two-by-two association" becomes stronger if **normal** synapsis has not occurred.

WHY ARE REARRANGEMENT HETEROZYGOSITIES LOCALLY INHIBITORY OF CROSSING OVER?
Inversion and translocation heterozygotes...

...leptotene/zygotene transition, an immediately preceding transition or, when SC formation has failed to occur at the **normal** time, after the early/mid-pachytene transition.

ACHIASMATE MEIOSIS
In achiasmate Bombyx female meiosis, crossing over at...

...similar case(s). Does SC formation occur in the absence of any of the molecules or machinery **normally** involved in DSB formation and ensuing events? Or are some components of recombination-related processes utilized, e...

...at diplotene (above) might be poised to evolve into achiasmate organisms, which retain SC even longer than **normal** , in substitution for,

14

or stabilization of, homology-dependent connections other than crossovers (above).

    CHIASMA TERMINALIZATION
A classical...on adjacent TFs to form a ladder-like CE layer. The individual layers are connected by occasional **vertical** fibers linking pillars on top of each other and keeping the layers in approximate register. Directions of...32. Barlow AL, Hulten MA. 1998. Combined immunocytogenetic and molecular cytogenetic analysis of meiosis I oocytes from **normal** human females. Zygote 6:27-38
    33. Barlow AL, Hulten MA. 1998. Crossing over analysis at pachytene...

...Cell 98:249-59
    49. Bogdanov YuF. 1977. Formation of cytoplasmic synaptonemal-like polycomplexes at leptotene and **normal** synaptonemal complexes at zygotene in Ascaris suum male meiosis. Chromosoma 61:1-21
    50. Bojko M. 1983...

33/3,K/19   (Item 2 from file: 98)
DIALOG(R)File   98:General Sci Abs/Full-Text
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03774006   H.W. WILSON RECORD NUMBER: BGSI98024006
A search for an inexpensive calculational method for the reliable prediction of the first adiabatic and vertical ionization potentials of carbenes. Photoelectron spectra of two stable carbenes.
Muchall, Heidi M
Werstiuk, Nick H; Choudhury, Biswajit
Canadian Journal of Chemistry (Can J Chem) v. 76 no2 (Feb. '98) p. 221-7
SPECIAL FEATURES: bibl il   ISSN: 0008-4042
 LANGUAGE: English
COUNTRY OF PUBLICATION: Canada

ABSTRACT: Photoelectron (**PE**) spectra of two stable carbenes 7 and 8 have been recorded and the spectra have been interpreted...

...and Becke3PW91 methods (3-21G(*) and 6-31+G* basis sets) as well as the CBS-4 **model** . For the first **vertical** IP, the HAM/3, Becke3LYP, and Becke3PW91 methods have been employed. CBS-4 and DFT calculations show...

33/3,K/20   (Item 1 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext
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04459716   (USE FORMAT 7 OR 9 FOR FULLTEXT)
Evolution of moist-baroclinic normal modes in the nonlinear regime
Fantini, Maurizio
Journal of the Atmospheric Sciences (IJAT), v56 n17, p3161-3166, p.6
 Sep 1, 1999
 ISSN: 0022-4928   JOURNAL CODE: IJAT
 DOCUMENT TYPE: Feature
 LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 2268

TEXT:
...   We will focus in this note on the early stages of evolution of the most unstable linear **normal** **modes** into the nonlinear regime, shortly after the nonlinear terms, marked by the coefficient y in the equations...

...that the meridional displacement of the perturbations obtained in F95 is
not present in the primitive equation (**PE**) simulations, and that
important aspects of the evolution are sensitive to the formulation of
perturbation buoyancy, which...

33/3,K/21   (Item 2 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext

04069443   (USE FORMAT 7 OR 9 FOR FULLTEXT)
The Power of Apartheid: State, Power and Space in South African Cities
Bond, Patrick
Journal of Southern African Studies (JSAS), v24 n3, p592-594, p.3
 Sep 1998
 ISSN: 0305-7070   JOURNAL CODE: JSAS
 DOCUMENT TYPE: Book Review-Favorable
 LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1409

TEXT:
...   fades – and regrettably is not revisited in Robinson's brief,
ambivalent conclusion – leaving her central chapters on **PE** 's development
from 1923 to 1972 to illustrate themes very much of concern to anyone,
coming from...

...what is happening, and it is here that readers would have welcomed
attention to the durability of **normalizing , modernizing ,** housing policy
discourses notwithstanding their failure since 1994.
      But because of its concreteness, The Power of Apartheid...

33/3,K/22   (Item 3 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext

04032272   (USE FORMAT 7 OR 9 FOR FULLTEXT)
**A short echo 1H spectroscopy and volumetric MRI study of the corpus
   striatum in patients with obsessive-compulsive disorder and comparison
   subjects**
Bartha, Robert; Stein, Murray B; Williamson, Peter C; Drost, Dick J; et al
American Journal of Psychiatry (GPSI), v155 n11, p1584-1591, p.8
 Nov 1998
 ISSN: 0002-953X   JOURNAL CODE: GPSI
 DOCUMENT TYPE: Feature
 LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 5553

TEXT:
...   footnote to figu' 2 contains a complete list of the metabolites and
macromolecules included i' the spectrum **model** .' ' Metabolite levels were
normalized to the unsuppressed water signal followin' correction for the
partial volume effect (29, 35) of the ratio...disorder. Arch Gen Psychiatry
1995; 52:393-398' ' 14. Aylward EH, Harris GJ, Hoehn-Saric R, Barta **PE** ,
Machlin SR, Pearlson GD' Normal caudate nucleus in obsessive-compulsive
disorder assessed by' quantitative neuroimaging. Arch Gen...

33/3,K/23   (Item 1 from file: 141)
DIALOG(R)File 141:Readers Guide

03536876   H.W.   WILSON   RECORD   NUMBER: BRGA97036876   (USE FORMAT 7 FOR
FULLTEXT)
Industry resources 1997/1998.
AUGMENTED TITLE: special issue
TCI (TCI) v. 31 (June/July '97) p. 14-18+
WORD COUNT: 215730

   (USE FORMAT 7 FOR FULLTEXT)

TEXT:
...   5:00PM, EST
    Develops Behaviours, a software based media control system. Behaviors
includes data bases and 3D **models** for automated luminaires and runs under
Windows NT with extensive use of graphics environment. Also offering
design...

   33/3,K/24   (Item 2 from file: 141)
DIALOG(R)File 141:Readers Guide

03008752   H.W.   WILSON   RECORD   NUMBER: BRGA95008752   (USE FORMAT 7 FOR
FULLTEXT)
The right connections.
AUGMENTED TITLE: high-speed fax modems
Angus, Jeff.
PC World v. 12 (Sept. 1994) p. 190-4+
WORD COUNT: 6732

   (USE FORMAT 7 FOR FULLTEXT)

TEXT:
...   have to be rebooted.
    Either use an internal fax-modem or make sure your external model is
connected through a **serial** port that uses a 16550 UART. About 50
percent of even the highspeed 486DX and Pentium systems...

...use the lower-end 8250 UART, which will almost certainly fall with a
28.8-kbps fax- **modem** working at its **normal** speed. You can buy a serial
port that's equipped with a 16550.
    To see which UARTs...

   33/3,K/25   (Item 1 from file: 370)
DIALOG(R)File 370:Science

00507477   (USE 9 FOR FULLTEXT)
**Turbulent Transport Reduction by Zonal Flows: Massively Parallel
   Simulations**
Lin, Z.; Hahm, T. S.; Lee, W. W.; Tang, W. M.; White, R. B.
Princeton Plasma Physics Laboratory, Princeton University, Post Office Box
   451, Princeton, NJ 08543, USA.
Science Vol. 281 5384 pp. 1835
Publication Date: 9-18-1998 (980918)   Publication Year: 1998
Document Type: Journal ISSN: 0036-8075
Language: English
Section Heading: Reports
Word Count: 2131

(THIS IS THE FULLTEXT)

Text: Turbulence shear suppression by E x   B flows (plasma flows
induced by an electric field **perpendicular** to a magnetic field line) is
the most likely mechanism responsible for the transition to various forms
...

...was implemented as a platform-independent program and achieved nearly
perfect scalability on various massively parallel processing (**MPP**)
systems (for example, CRAY-T3E and Origin-2000 supercomputers). This
scalability enables us to fully use the rapidly increasing **MPP** computer
power that presently allows routine nonlinear simulations of more than
$10.^{(8)}$ particles to treat...is the ion temperature, and $T._{(e)}$ is the
electron temperature. The size of the plasma **column** was a = 160 (rho)
$._{(i)}$, where (rho) $._{(i)}$ is the thermal ion gyroradius measured at...
Figure Removed

Figure F3
Caption: Instantaneous radial profile of E x B shear **normalized** to
gyrofrequency ((Omega) $._{(i)}$) in local (dotted) and global (solid)
simulations with broad profile...

33/3,K/26   (Item 2 from file: 370)
DIALOG(R)File 370:Science
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00504174   (USE 9 FOR FULLTEXT)
Active Deformation of Asia: From Kinematics to Dynamics
England, Philip; Molnar, Peter
P. England, Department of Earth Sciences, Oxford University, Oxford OX1
   3PR, UK. ; P. Molnar, Department of Earth, Atmospheric, and Planetary
   Sciences, Massachusetts Institute of Technology, Cambridge, MA 02139,
   USA.

       (THIS IS THE FULLTEXT)

...Text: is not confined to narrow bands, but is spread over regions
hundreds to thousands of kilometers in **horizontal** extent. The actively
deforming part of Asia, which we consider here, is larger than several of
the...
...stress nor strain can be measured at depth within the lithosphere, it is
impossible to determine the **vertical** gradients of stress in Eq. 1 (B6) .
We therefore treat deformation of the lithosphere in terms of **vertical**
averages of stress and strain rate in a thin sheet of fluid [for example,
(B3) (B4) (B7)]. This simplification is appropriate where the **horizontal**
dimensions of a region of active deformation exceed by many times the
thickness of the lithosphere (B8...

...km, density contrasts within the lithosphere are isostatically
compensated. Thus, the weight per unit area of any **column** of rock is
supported by the **vertical** traction, (final-sigma) $._{(zz)}$, on its base
(final-sigma) $._{(zz)}(z)$ = -g Limit{ (integral) Low...

...The **horizontal** equations in Eq. 1 may be expressed in terms of deviatoric stress (B9) , and simplified by taking **vertical** averages and neglecting shear tractions on the base of the lithosphere [for example, (B10)] L ((partial-derivative sup(th) component of the deviatoric stress tensor, averaged **vertically** through the lithosphere, and (Gamma) = -Limit{ (integral) Low=0, Upper=L} (final-sigma) .inf(zz)(z)dz...

...0, Upper=L} Limit{ (integral) Low=0, Upper=z} (rho) (z (prime))dz (prime) For isostatically balanced **columns** of lithosphere, differences in (Gamma) are equal to differences in the gravitational potential energy per unit area between **columns** (B4) (B10) (B11) (B12...

...Equation 3 states that **horizontal** gradients of the deviatoric stress required to deform a thin viscous sheet are balanced by **horizontal** gradients of its gravitational potential energy (B4) (B7) (B10) (B11) . A simple test of the hypothesis that...

...a knowledge of the density structure of the lithosphere. Because there are no observations of components of **vertically** averaged stress in the lithosphere and no direct observations of the gravitational potential energy of the lithosphere...

...The stresses in Eq. 3 can be related to deformation by specifying a relation between the **vertically** averaged deviatoric stresses and the **vertically** averaged strain rates in the lithosphere. The **vertical** averages of a wide range of possible rheological profiles for the continental lithosphere probably obey a relation...

...Gamma) * = (Gamma) /BL x (1 sec).sup(1/).sup(n) is the dimensionless potential energy of a **column** of lithosphere...
...mantle, the difference (Delta) (Gamma) in gravitational potential energy per unit area between any two isostatically balanced **columns** of lithosphere is simply (Delta) (Gamma) = (g (rho) .inf(c)/2)[1 -((rho) .inf(c)/ (rho) .inf...

...mantle, and S.inf(1) and S.inf(2) are the thicknesses of crust in the two **columns** . We use Eq. 10 to approximate gravitational potential-energy differences, estimating crustal thickness from surface elevation by assuming isostatic balance with a standard **column** of oceanic ridge (B14) . We recognize that possible variations in the thickness and temperature structure of the...strain-rate components within each triangle to the relative velocities of its vertices, forming a set of **normal** equations that could be solved to yield the velocity field (Fig. 1). Self-consistent strain rate components...figure 9 of (B19)], converted to dimensionless stress using Eq. 7, with n = 3. Bars show principal **horizontal** stresses; black bars correspond to contractional stress and white bars to extensional stress. Lengths of symbols are...

...Figure Removed

Figure F4
Caption: Calculated dimensionless potential energy (**PE**) (contours in Fig. 3) against the potential energy calculated from Eq. 10, using observed values of surface...

...around Lake Baikal. Open symbols are for the remainder of the region shown in Fig. 3. The **straight line** has a slope of 1.3 x 10.sup(12) N m.sup(-2) s.sup(1...

...Figure Removed

Begin Table : **Columns** 1 - 3 of 4

Caption:
Strain rate (|$$ (over-dot) epsilon = equals even dots/<RAD><RCD>2
</RCD...

33/3,K/27   (Item 3 from file: 370)
DIALOG(R)File 370:Science
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00500434   (USE 9 FOR FULLTEXT)
Structural Analysis of Substrate Binding by the Molecular Chaperone DnaK
Zhu, Xiaotian; Zhao, Xun; Burkholder, William F.; Gragerov, Alexander;
  Ogata, Craig M.; Gottesman, Max E.; Hendrickson, Wayne A.
X. Zhu, X. Zhao, W. F. Burkholder, A. Gragerov, M. E. Gottesman, and W. A.
  Hendrickson are in the Department of Biochemistry and Molecular
  Biophysics, College of Physicians and Surgeons, Columbia University, New
  York, NY 10032, USA. X. Zhu and W. A. Hendrickson are also with the
  Howard Hughes Medical Institute, Columbia University. W. F. Burkholder
  and M. E. Gottesman are also in the Institute of Cancer Research,
  Columbia University, New York, NY 10032, USA. C. M. Ogata is with the
  Howard Hughes Medical Institute, National Synchrotron Light Source,
  Brookhaven National Laboratory, Stony Brook, New York, USA.
Science Vol. 272 5268 pp. 1606
Publication Date: 6-14-1996 (960614)   Publication Year: 1996
Document Type: Journal ISSN: 0036-8075
Language: English
Section Heading: Research Articles
Word Count: 7753

        (THIS IS THE FULLTEXT)
...Text: They are named for their selective expression in response to
metabolic stress, but they are also expressed **normally** and participate in
various cellular processes, including the folding of nascent polypeptides,
assembly and disassembly of multimeric...of helix aB, and the shortest
dimension coincides with the direction of the peptide extension and is
perpendicular to the plane of Fig. 2, A and B. This flattened profile
(Fig. 2, B and C...

...beta) 6, (beta) 7, (beta) 8) is a rather regular, twisted (beta)
sheet with hairpin (beta) turns **connecting** the **successive** strands,
whereas the top sheet ((beta) 5, (beta) 4, (beta) 1, (beta) 2) is
highly irregular (top...defining (beta) bulges in (beta) 2 and (beta)
5, which in turn project the loops out almost **perpendicular** to the top
(beta) sheet. There are three crossover connections between the sheets.
Two of these form ... Begin Table : **Columns** 1 - 4 of 9

Caption:
Statistics for MAD data and phase determination from a selenomethionyl
crystal. The...

33/3,K/28   (Item 4 from file: 370)
DIALOG(R)File 370:Science
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00500374   (USE 9 FOR FULLTEXT)
The Whole Structure of the 13-Subunit Oxidized Cytochrome c Oxidase at 2.8

angstrom

Tsukihara, Tomitake; Aoyama, Hiroshi; Yamashita, Eiki; Tomizaki, Takashi;
Yamaguchi, Hiroshi; Shinzawa-Itoh, Kyoko; Nakashima, Ryosuke; Yaono,
Rieko; Yoshikawa, Shinya
T. Tsukihara, H. Aoyama, E. Yamashita, T. Tomizaki, H. Yamaguchi are at the
Institute for Protein Research, Osaka University, 3-2 Yamada-oka, Suita
565, Japan. ; K. Shinzawa-Itoh, R. Nakashima, R. Yaono, S. Yoshikawa are
at the Department of Life Science, Himeji Institute of Technology,
Kamigohri Akoh, Hyogo 678-12, Japan.

(THIS IS THE FULLTEXT)

...Text: 12 transmembrane helices, without any large extramembrane part
(Fig. 3A). This subunit is cylindrical and is oriented **perpendicularly** to
the membrane surface. Three semicircular arrangements of transmembrane
helices, each composed of four helices, form a...

...the top). Two of the three semicircles hold hemes a and a.inf(3),
respectively, which are **perpendicular** to the membrane plane. The twisted
hydroxyl ...are fully consistent with those of bacterial enzyme (B7) . The
helices of subunit I are not completely **perpendicular** to the membrane
surface plane, but one end of each helix is placed on the top left and the
other end on the bottom right (angles of 20.Deg. to 35.Deg. against the
vertical line from the membrane plane) when the cytosolic surface of
subunit I is "up". The extramembrane portion...As stated above, most of the
transmembrane helices are not **vertical** to the membrane plane and usually
are not parallel to each other. Any one of a pair...form a triangle, the
plane of which is essentially parallel to the shortest hydrogen-bond system
and **perpendicular** to ...Phospholipids. Eight phospholipids, five
phosphatidyl ethanolamines (**PE**) and three phosphatidyl glycerols (PG),
have been clearly demonstrated in the multiple isomorphous replacement
electron density distribution...

...transmembrane region as would be expected if these phospholipids are in
the lipid bilayer (Fig. 7). One **PE** and one PG are placed on the cytosolic
side and the other six, on the matrix side...

...the transmembrane surface of subunit I on the opposite side from the
subunit III contact and one **PE** on subunit VIa (Fig. 7...Trp.sup(99) of
the same subunit (Fig. 9A). The sterol group of the cholate is located
horizontally in the membrane surface plane on the cytosolic side. An OH
group at position 12 of the...

...forms a hydrogen bond to the oxygen atom of the phosphoester of PE5. The
sterol group is **vertical** , with the acid terminal on the bottom, in line
with the phospholipids on the matrix side (Fig...Figure Removed

Begin Table : **Columns** 1 - 3 of 3

Caption:
Geometries of interaction between two adjacent transmembrane a helices.

Inclination degree   Orientation...

33/3,K/29   (Item 1 from file: 553)
DIALOG(R)File 553:Wilson Bus. Abs. FullText
(c) 2002 The HW Wilson Co. All rts. reserv.

04044591   H.W.   WILSON   RECORD   NUMBER: BWBA99044591   (USE FORMAT 7 FOR FULLTEXT)
Explaining movements in UK stock prices.
Cuthbertson, Keith
Hayes, Simon; Nitzsche, Dirk
Quarterly Review of Economics and Finance v. 39 no1 (Spring 1999) p. 1-19
LANGUAGE: English
WORD COUNT: 7287

   (USE FORMAT 7 FOR FULLTEXT)

TEXT:
...   the dividend-price ratio in the VAR (row 1, Table 3). The
persistence measure for excess returns **Pe** is 1.55 (s.e. = 0.59) and the
proportionate contribution of news about future excess returns...

...capital gains and losses. This result is therefore broadly consistent
with that found for the real returns **model** .

   The results in **row** 2 of Table 3 show that variations in the
variables in the VAR do not appreciably affect...

33/3,K/30   (Item 2 from file: 553)
DIALOG(R)File 553:Wilson Bus. Abs. FullText
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03064451   H.W.   WILSON   RECORD   NUMBER: BWBA95064451   (USE FORMAT 7 FOR FULLTEXT)
**Editor & Publisher 1995 syndicate directory: 70th annual directory of
   syndicated services.**
Editor & Publisher, the Fourth Estate (Ed Publ Fourth Estate) v. 128 sec2
(July 29 '95) p. 28S-178S
LANGUAGE: English
WORD COUNT: 127439

   (USE FORMAT 7 FOR FULLTEXT)

TEXT:
...   SHN
Rosenfeld, Stephen -- Stephen S. Rosenfeld   LAT-WP
Rosenkrantz, Linda -- Contemporary Collectibles   CNS
Rosenthal, A.M. -- Rosenthal **Column** (New York Times news Services)
                                                    NYT
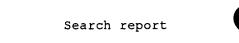Rosenthal, Harry -- Over Fifty   APN
Rosenthal, Neil -- Intimacy   DAA
Ross, Alicia...Zaslow, Jeffrey -- All That Zazz
CATF
Zebora, Jim -- What's Brewing   WB
Zisman, Lawrence H. -- Marketing Maven   **MPP**
Zisman, Lawrence H. -- Marketing Yourself   **MPP**
Zollman, Joseph -- Judaica Stamp & Coin Reporter   STA
Zollman, Joseph -- Learning Through Stamps   STA
Zollman, Joseph -- Spotlight on...ing/fax/mail -Patricia Arrigoni
ATS
Marketing Maven -- 1tw -600 -man/mail -Lawrence H.

Zisman/Anabel Kligerman   **MPP**
Marketing Yourself -- 2tw -600 -man/mail -Lawrence H.
Zisman/Anabel Kligerman   **MPP**
Matters of the Heart -- 1tw -600 -orp/mail/DF/ctc/disk -Dr.
Marshall Franklin   CNS
*McGee's...disk/rom/line/fax -Staff   NAPS
Marketing Maven -- 1tw -600 -man/mail -Lawrence H.
Zisman/Anabel Kligerman   **MPP**
Media -- 1tw -hpt -orp/mail   AMW
* Mexican Stock Market -- 5tw -200-300 -wire/DNS -Various
                                                             UPI

Meyers...